The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1768.—Vol. XXXIX. LONDON, SATURDAY, JULY 10, 1869. (WITH SUPPLEMENT) {STAMPED ....SIXPENCE, UNSTAMPED..FIVEPENCE

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 1842.)

Mr. CROFTS transacts business in the way of PURCHASE or SALE of every description of stocks, but particularly BRITISH MINES, at net prices. All orders meet with the utmost punctuality, and advice given as to the nature and eligibility of INVESTMENTS when required.

GREAT ROYALTON.—These shares are specially recommended at the present price, as they must very considerably rise in the course of a few months. It is opening out wonderfully, and will, undoubtedly, be a great mine.

MR. W. H. BUMPUS, STOCK AND SHAREDEALER,
44, THREADNEEDLE STREET, LONDON, E.C., has FOR SALE the following SHARES, free of commission :—

35 Anglo-Argent., 21s.	10 Great Laxey, £18 8s 9	50 Rossa Grande, 22s.
100 Anglo-Brazilian, 11s.	5 Great Vor, £13⅞.	50 Royalton, 17s. 3d.
15 Chiverton, £3⅝.	50 Gen. Brazilian, 13s 9d	25 So. Condurrow, 30s.
10 Chiverton Moor, £3.	25 Gt. No. Laxey, 21s. 9d.	15 South Darren, 37s.
50 Chontales, 26s. 9d.	20 Marke Valley, £8⅛.	5 Spearne Moor, £21½.
35 Don Pedro, £4¼.	20 New Lovell, 34s. 3d.	100 Taquaril, 11s.
5 East Lovell, £15.	10 North Levant, £6¼.	25 West Basset, 21s. 6d.
25 East Grenville, £4 3 9	25 North Treskerby, 13s.	3 Wt. Chiverton, £48¾.
20 E. Carn Brea, 10s. 6d.	50 Princess of Wales, 5s 3d	50 Wt. Godolphin, 24s 9d
15 East Caradon, £6¾.	50 Prince of Wales, 23s 6	20 Wh. Uny, £3⅛.
20 Frank Mills, £4.	20 Pestarena, £1¼.	15 Wh. Grenville, 51s. 6d
100 Frontino, 25s. 9d.	10 Penhalls, £5¾.	50 Yudanamutana, 33s.

MR. WILLIAM WARD,
95, BISHOPSGATE STREET WITHIN, LONDON, E.C.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER,
224 AND 225, GRESHAM HOUSE,
OLD BROAD STREET, LONDON, E.C.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER, 48, THREADNEEDLE STREET, LONDON, E.C.
Bankers: London and Westminster, Lothbury.

MR. Y. CHRISTIAN, STOCK AND SHAREDEALER,
11, ROYAL EXCHANGE, E.C,
Bankers: Bank of England.

MR. G. D. SANDY, STOCK AND SHAREDEALER,
48, THREADNEEDLE STREET, LONDON, E.C.
Daily Price List on application post free. References exchanged.

MR. F. W. MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
Bankers: London Joint-Stock Bank.

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROGMORTON STREET, LONDON, E.C.
Every description of shares BOUGHT and SOLD at the best market prices.

MR. J. H. COCK, STOCK AND MINING SHAREDEALER,
74, OLD BROAD STREET, LONDON, E.C.
Fifteen years' experience in Cornwall and London.
Business transacted in all the leading mines, and those difficult of purchase or sale negociated.
SPECIAL in Van Consols, Fron Fawnog, New Lovell, South Condurrow, Ding Dong, and North Levant.

MESSRS. J. HUME AND CO., STOCK AND SHAREDEALERS, 74, OLD BROAD STREET, LONDON
(fronting the Stock Exchange),
Publishers of "THE INVESTMENT RECORD AND MINING REVIEW," which contains particulars of Van Lead Mine, Van Consols, Great Rock, &c.
A list of Dividend Mines, paying 10 to 30 per cent. on the price of shares.

Closing Prices.		Closing Prices.	
Don Pedro.....prem.	£ 3⅛ to £ 3⅛	East Caradon	£ 6½ to £ 7
Taquaril .....prem.	3s. „ 4s.	Wheal Uny	3½ „ 3¾
Chontales	1¼ „ 1⅜	Prince of Wales	22s „ 24s
Frontino	24s „ 25s	South Condurrow	27s „ 29s
Chiverton	3¼ „ 3½	Wheal Agar.....	27s 6d „ 30s
West Chiverton	47⅛ „ 48	Van	36½ „ 37½
East Lovell	14¼ „ 14¾	Van Consols	2⅛ „ 2¾
Tincroft	15½ „ 16	Great Rock	7½ „ 8⅛
Great Vor.....	13¾ „ 14¼	Caldbeck Fells.....	1 „ 1⅛

SPECIAL BUSINESS in Great Rock, which are strongly recommended, Van, Van Consols, East Lovell, Prince of Wales, &c.
Bankers: The London Joint-Stock Bank.

MATTHEW GREENE, STOCK AND SHAREDEALER,
14, PINNER'S HALL, OLD BROAD STREET, LONDON, E.C.
Bankers: Bank of England.

SPECIAL.

MATTHEW GREENE has been conducting mining operations in the "Van District" for some years past, and is well acquainted with all the mines in the neighbourhood. Every information can be had concerning the "Van Mine, Van Consols, East Van, Aberdaunant, and South Van." Intending investors will do well to consult M. G. before embarking in any of the many mines which are being offered at fabulous prices, which are certainly highly speculative, as no mining work has been done, or any preparations made for working them. Large sums of money are being made in this district, and without proper caution and good advice, large sums of money will be lost.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C.
T. R. has BUSINESS in the following mines, at close market prices:—

Bedford Consols.	East Grenville.	New Lovell.
Bedford United.	East Caradon.	Prince of Wales.
Don Pedro.	Frontino and Bolivia.	West Drake Walls.

T. R. is in a position to give *bona fide* advice respecting the principal Welsh mines now in full work, also upon some important untried setts, having been twice well over the district of Llanidloes, Aberystwith, and vicinity within the past few weeks; parties will do well, therefore, to consult one practically capable of giving advice before embarking their capital.
There are several good mines in Cornwall worthy of attention at the present low prices, as there can be no doubt but what they will ere long have a great rise in market value.
T. R. is a BUYER of Caldbeck Fell shares.
T. R. has SPECIAL BUSINESS in the following mines—Holmbush and Kelly Bray United, Llanidloes Lead Mine, Van, Van Consols, Bronfloyd, Tygwyn, and Caldbeck Fells.
Money advanced to any extent on good mining shares.
Office hours Ten to Four. Bankers: Bank of England.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 15 years), has FOR SALE the FOLLOWING SHARES, at net prices :—

20 Aberdaunant, £2½.	25 Linares, £2⅞.	50 Van Consols, 6s. 3d. premium.
25 Chontales, 28s. 9d.	10 Marke Valley, £8 8s 6	4 Van, £37⅜.
10 Chiverton, £3 11s. 3d.	25 New Lovell, 34s. 6d.	3 Wt. Chiverton, £48¾.
15 Chiv. Moor, £2 18s 9d	20 North Crofty, 14s. 6d.	2 West Frances, £51¼.
30 Don Pedro, £3 4s 3 pm.	50 No. Treskerby, 11s. 6d	40 W. Godolphin, 21s. 3d
40 Drake Walls, 16s. 3d.	40 Prince of Wales, 45s.	25 Wh. Grenville, 48s. 3d
15 East Caradon, £6 13 9	35 Rossa Grande, 8s. 9d. premium.	5 Mary Ann, £14 16s 3d
10 East Lovell, £14½.	25 Royalton, 17s.	5 West Caradon, £4½.
50 Frontino, 25s.	20 Rosewall Hill, 28s. 9d	5 Wh. Margaret, £5¾.
10 Great Laxey, £18⅝.	30 So. Condurrow, 28s 6d	10 Wheal Uny, £3 14s.
50 Gen. Brazilian, 3s. 3d premium.	30 South Merlyn, 22s 6d	25 Yudanamutana, 31s 3
10 Great Vor, £14½.	5 Tincroft, £16¼.	

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 20 years), is a SELLER at net prices of :—

10 Van, 37⅛; 65 Van Consols; 40 Prince of Wales, 21s. 9d.; 70 Holmbush and Kelly Bray, £4; 35 Drake Walls, 17s. 6d.; 30 Penhall, 6⅛; 2 West Chiverton, £47¾; 40 East Carn Brea, 11s.; 30 Wheal Agar; 50 West Maria and Fortescue, 15s. 6d.; 30 Fedn-an-drea, 3l. 18s. 9d.; 65 West Basset, 18s. 9d.; 70 Maudlin, 32s. 6d.; 2 Spearne Moor; 3 Minera, £187½; 100 Okel Tor; 5 Trumpet Consols; 30 Great South Chiverton; 60 Crebor, 8s. 6d.; 90 North Jane; 50 West Drake Walls, 6s.; 100 Princess of Wales, 6s. 6d.; 10 Wheal Kitty (St. Agnes); 20 Alamillos, £1¾; 100 Anglo-Brazilian, 11s.; 25 Don Pedro, £3 11s. 6d. prem.; 25 Linares, £2. 18s. 9d.; 200 General Brazilian, 4s. 3d. prem.; 250 Sao Vicente; 10 Taquaril, 3s. 9d. prem.; 25 United Mexican, £2¾; 40 Chontales, £1 8s. 6d.
SPECIAL BUSINESS in Van, Great Rock, and Van Consols.

CORNISH AND FOREIGN MINES—TO SHAREHOLDERS AND OTHERS.
PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, July 9, No. 540, Vol. XI., price 6d. each copy, forwarded on application, contains information on the following mines :—

Great Rock.	Great Western Mines.	Great North Laxey.
Great Wheal Vor.	Providence.	West Caradon.
East Wheal Lovell.	New Wheal Lovell.	Wheal Uny.
North Wheal Crofty.	East New Lovell.	West Wheal Seton.

With a Leading Article on the Tin Trade and Tin Mines, Statistical Account of the Providence United Mines and West Wheal Seton, List of Mine Dividends paid in June, &c.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST—STOCK EXCHANGE SECURITIES. Published every evening at 5 o'clock. It contains the latest prices of railways, banks, mines, foreign stocks and bonds, financial, insurance, and miscellaneous shares, remarks on the daily rise and fall in prices, with advice as to purchase and sales. Annual subscription, £1 1s.; by post, £2 5s.; monthly subscription—by post, 4s.; single copy, 1d.; by post, 2d.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to *bona fide* investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.
PETER WATSON, STOCK AND SHAREDEALER,
79, OLD BROAD STREET, LONDON
(three doors only from Hercules-passage, entrance to the Stock Exchange),
Twenty-four years' experience.
(Two in Cornwall and Twenty-two in London.)
Bankers: The Alliance Bank, and the Union Bank of London.
References given and required (when necessary) in all the principal towns of the United Kingdom.

MR. EDWARD COOKE,
STOCK AND MINING SHAREDEALER, 76, OLD BROAD STREET
(and Mining Exchange), LONDON, E.C.
Is a SELLER or BUYER of Shares in the Van Mine, Great Rock, and Van Consols at close price. Information on these mines afforded on application.
Shares in all dividend and best progressive mines dealt in.
WEST CHIVERTON shares, as an investment, are good to buy. At current price they will pay 16 to 18 per cent. per annum.
E. COOKE has been in Wales during the week, and will be happy to give information respecting Welsh mines.
References given.
Price-list sent free on application.
Bankers: Alliance Bank.

MR. W. H. CUELL,
No. 42, CORNHILL, LONDON, E.C.

MR. HENRY MANSELL, STOCK AND SHAREDEALER,
1, PINNER'S COURT, OLD BROAD STREET, LONDON.

MR. J. B. REYNOLDS, 70, BISHOPSGATE STREET WITHIN, LONDON, E.C.,

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MR. JOHN MOSS, STOCK AND SHAREDEALER,
ST. MICHAEL'S CHAMBERS, 42, CORNHILL, E.C.
Business as BUYER or SELLER in Frontino, Chontales, Don Pedro, General Brazilian, and Taquaril Gold shares.
Bankers: City Bank, Finch-lane, E.C.

BARTLETT AND CHAPMAN'S "INVESTMENT CIRCULAR AND FINANCIAL RECORD"
(Published on the first Wednesday in each month)
Comprises—A Comparison of the Safety and Profit of English and Foreign Loans, a Comprehensive Review of the Stock, Share, and Money Markets for the preceding month; an Enumeration and Comparison of the Whole Circle of Investments; and Valuable Suggestions for Purchase or Sale.

GREAT SOUTH CHIVERTON MINE.

We have for the past two years drawn particular attention to this mine, and have strongly advocated the purchase of shares. Those who acted upon our advice will now reap the profit, and, as the prospects are rapidly improving, we with equal confidence recommend their immediate purchase. The shares must further and considerably advance in value, as the lode in the rise above the 50 produces 1¼ ton of lead per fathom, and the 50 end 1¼ ton per fathom. Splendid piles of lead are being raised, which will soon be got ready for the market. No time should be lost in the purchase of shares.
BARTLETT and CHAPMAN, Stock and Sharedealers, 36, Cornhill, E.C.

MR. C. A. POWELL, BRITISH AND FOREIGN STOCK AND SHAREDEALER, No. 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
BUYER or SELLER of every description of negociable securities at current market prices net.
Mr. POWELL is in a position to deal at close prices in the principal gold shares.
WANTED,—An OFFER for 100 St. Just Amalgamated.
SPECIAL BUSINESS in Brynpostig, Mid-Wales, Holmbush and Kelly Bray United, Prince of Wales, Great Vor, North Treskerby, Van, Van Consols, and Caldbeck Fells. References exchanged.
July 9, 1869. Bankers: City Bank, Finch-lane.

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C.
SPECIAL BUSINESS in South Merlyn, West Godolphin, North Treskerby, Bryn Gwiog, Frank Mills, West Caradon, Great South Chiverton, Taquaril Gold, Don Pedro, and South Condurrow shares.
Selected list of mine shares for investment or speculation forwarded upon receipt of two stamps.
BUYER of 100 South Merlyn shares.

MR. HENRY MORDAUNT, STOCK AND SHAREDEALER,
20, THREADNEEDLE STREET, having had many years' experience in the market is PREPARED to ADVISE and DEAL in all Mining, Miscellaneous, and Stock Exchange Securities, at the lowest market prices. The following are worth immediate attention :—Prince of Wales, 21s. to 23s.; East Rosewarne, 7s. 6d. to 10s.; East Carn Brea, 7s. 6d. to 10s.; Hingston Down, 8s. to 10s.; Wheal Grenville, 45s. to 47s. 6d.; Chontales, 27s. 6d. to 28s. 9d.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, LONDON, E.C., DEALS in all STOCKS AND SHARES either for cash or the fortnightly settlement.
W. T. is always in a position to do business in the Brazilian Gold Mines.
W. T. has SPECIAL BUSINESS in Taquaril Gold Mine (7s. 6d. and 10s. paid) shares, which he confidently recommends to his clients as a first-class investment; the latter are not likely to have any further calls.
W. T. still recommends his clients to purchase shares in the Van Mine, which are still much below their real value.
Bankers: The Alliance Bank.

MR. EDWARD BREWIS, STOCK AND SHAREDEALER,
No. 34, OLD BROAD STREET, LONDON, E.C.
Business transacted for cash or account in every description of tin, lead, copper, and iron mining shares.
Money advanced on mining shares for long or short periods.
Bankers: The Alliance Bank, London, E.C.

MR. THOMAS THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.
Mr. THOMPSON recommends the purchase of Holmbush and Kelly Bray United and Royalton Mines.
The success which has attended the Van Mine naturally attracts attention to the district. Mr. THOMPSON is in a position to give reliable information as to the new mines now being brought forward in this neighbourhood.

INVESTMENT.—MESSRS. TREDINNICK AND CO. are instructed to OFFER FOR SALE ONE MOIETY of a COPPER MINE of great promise—say, 10-20ths—at £200 each; 10 per cent. payable on application, 40 per cent. on approval of the applicant, and 50 per cent. at the expiration of three months. As this is a rare opportunity for profitable and *bona fide* investment, none need apply who prefer market gambling in shares to substantial gains and dividends from legitimate mining.
Crown-court, Threadneedle-street, London, E.C.

MR. T. P. THOMAS, MINING AGENT AND SURVEYOR, 77, OLD BROAD STREET, LONDON.
Lead Mining in the counties of Cardigan and Mongomery has lately been very successful, and likely to continue so. Mr. T. P. THOMAS having a thorough knowledge of these districts is at all times prepared to make selections for investors.

Third Edition, Price One Shilling; post-free, fourteen stamps,
MINING FIELDS OF THE WEST:
A PRACTICAL EXPOSITION OF THE
PRINCIPAL MINES and MINING DISTRICTS of CORNWALL and DEVON.
Published by CHARLES THOMAS,
At No. 3, Great St. Helen's, London, E.C.

MR. CHARLES THOMAS,
MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MR. W. H. LANYON,
(Late of Kennall Gunpowder Company)
GUNPOWDER MERCHANT,
TRURO.

FOR SALE:—
1000 EAST LAXEY MINE SHARES.
600 EAST SNAEFELL MINE SHARES.
400 RENNIE LAXEY MINE SHARES.
100 GREAT NORTH LAXEY MINE SHARES.
Apply to JAMES IRVING, Sharebroker, Carlisle.

FOR SALE, AT DUNDYVAN IRON WORKS, COATBRIDGE, A BLOWING ENGINE, by Murdoch and Aitken, in fine condition, diameter of blowing cylinder 108 in., diameter of steam cylinder 54½ in., 10 ft. stroke.—Apply to EASTON, HARRISON, and Co., at the Works.
Also, ENGINE HOUSE and BOILERS, if wanted.

BLAST ENGINE FOR SALE.—An EXCELLENT, WELL MADE, NEW HORIZONTAL ENGINE; steam cylinder, 36 in. 7 ft. 2 in. stroke; air cylinder, 6 ft. 9 in. diameter; fly wheel, 18 ft. 2 in. diameter, with all fittings complete.
Further particulars from "U. S.," care of Editor, MINING JOURNAL Office, 26, Fleet-street, London, E.C.

IRON TESTING MACHINES FOR SALE.—ONE of ROBINSON and COTTAM'S, to test up to 1½ in. area, equal to new; and ONE more powerful, made by MESSRS. PETO, BRASSEY, and BETTS, quite new, and complete, with weights, &c.
Apply to "W.," care of Editor, MINING JOURNAL Office, 26, Fleet-street, London, E.C.

PUMPING-ENGINE.—WANTED, a good SECONDHAND ENGINE, of about 50 inches cylinder, and (say) 9 feet stroke, with ONE BOILER.
Particulars, with price, makers' name, &c., to be addressed Mr. S. RICHARDS, Crosby House, 95, Bishopsgate-street Within, London.

WATER-WHEEL.—WANTED TO PURCHASE FOR THE VAN CONSOLS MINE, MONTGOMERYSHIRE, A FIRST-CLASS WATER-WHEEL, about 50 ft. diameter, and about 6 ft. breast; also, 200 fms. of FLAT-RODS, and 50 to 60 fms. of 10 in. or 12 in. PUMPS.
Particulars to be sent to MATTHEW GREENE, Secretary, Van Consols Mining Company, 14, Pinner's Hall, Old Broad-street, London.

DEVON COPPER MINE,
OKEHAMPTON.
NOTICE TO CREDITORS.
ALL PERSONS having any CLAIMS or DEMANDS against the adventurers in the above Mine are requested to SEND PARTICULARS of the same to the undersigned, on or before SATURDAY, the 17th inst., that the same may be EXAMINED and DISCHARGED, and all claims not then received will not be paid. GEORGE DOWN, Cathedral-yard, Exeter.
Dated the 6th day of July, 1869.

THE AUSTRALIAN MINING COMPANY.
Incorporated under Royal Charter.
Notice is hereby given, that the TWENTY-FOURTH ANNUAL GENERAL MEETING of the shareholders of this company will be HELD at the London Tavern, Bishopsgate-street, E.C., on MONDAY, the 26th inst., at One o'clock P.M. precisely, to receive the report, accounts, and balance-sheet for the past year; to elect directors in lieu of Henry Collier, Esq., and Henry R. Wotton, Esq., who retire by rotation; to fix the remuneration of the auditors for the past year; and to elect auditors for the present year. By order,
GEORGE PALMER, Chairman.
No. 1, Coleman-street-buildings, Moorgate-street, London, E.C., July 7, 1869.

MR. H. D. HOSKOLD,
MINING ENGINEER,
LAND AND MINERAL SURVEYOR
CINDERFORD, NEWNHAM.
Gentlemen requiring reliable and correct information respecting any Coal or Iron Mine Property in the Forest of Dean may obtain it on application.
Surveys, Plans, Reports, and Valuations on the usual moderate terms.

MR. P. S. HAMILTON,
MINING AND REAL ESTATE AGENT,
AND PRACTICAL GEOLOGIST,
OFFICE,—No. 72, GRANVILLE STREET, HALIFAX, NOVA SCOTIA.
N.B.—Sales and purchases of lands, quarries, and mining property negotiated upon the most advantageous terms, and with all possible dispatch. Explorations made or supervised, and reports prepared where required with the utmost care. Public attention is called to the fact that, owing to his experience as Gold Commissioner and Chief Commissioner of Mines, and as one who has been for years engaged in practical mining and geological explorations, Mr. HAMILTON has had opportunities which no other person has heretofore possessed of becoming intimately acquainted with the mineral resources of Nova Scotia.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX AND CHEMICAL WORKS,
NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.
JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER,
Purchaser of Borate of Lime and Tincal.
THE WORKS ON SALE.

LEAD MINES AS AN INVESTMENT.
Now ready, by J. H. MURCHISON, Esq., F.R.G.S.,
THE SECOND EDITION OF
THE "LEAD MINES OF CARDIGANSHIRE AND MONTGOMERYSHIRE,"—districts comprising: VAN, DYLIFFE, LISBURNE, EAST DARREN, SOUTH DARREN, CEFN BRWYNO, and other important Mines. With a MAP, showing the position of the different Mines; arranged and drawn specially for this Pamphlet.
This edition is revised, with additional remarks, and more mines represented on map. Price 1s.
8, Austinfriars, London, E.C.

THE MINING ATLAS.
MR. SPARGO'S MINING ATLAS is NOW READY.
Issued in numbers, 1s. each, the first of which can be obtained at the MINING JOURNAL Office, 26, Fleet-street; and at 224 and 225, Gresham-house, Old Broad-street, E.C.

MR. THOMAS THOMAS,
ASSAYER, &c.,
COPPER ORE WHARVES, SWANSEA.

MESSRS. STUART AND CO., 93, BISHOPSGATE STREET, have Business as BUYERS or SELLERS at best market prices in Luey Phillips, Van, East Bottle Hill, East Carn Brea, West Godolphin, Don Pedro, East Providence, Prince of Wales, East Lovell, Frontino and Bolivia, and Mary Ann. Frontino; these shares five weeks ago were 15s. to 17s. each when we recommended them; now 24s. to 26s., or an advance of 50 per cent.

The Imperial Ottoman Mining Company

(LIMITED).

ESTABLISHED FOR WORKING THE CELEBRATED SILVER-LEAD DEPOSITS OF PELIDLI,

Situate in Asiatic Turkey, between Scutari and Ismidt, within 28 miles of Constantinople, and eight days' journey from London.

Incorporated under the Companies Acts, 1862 and 1867, which strictly limit the liability to the amount subscribed for by each shareholder.

CAPITAL £100,000, IN SHARES OF £1 EACH.

First issue, 70,000 shares, of which only 35,000 remain for allotment.

10s. per share to be paid on application, and 10s. on allotment.

The shares being fully paid on allotment, no further liability will be incurred, and share warrants to bearer will be issued.

Should no allotment be made, the deposits will be returned without deduction or delay.

DIRECTORS.

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Major HENRY JELF-SHARP.
JOHN FRANCIS HOLCOMBE READ, Esq., 4, Austinfriars, E.C.
JAMES ROBERTSON, Esq., 4, Angel-court, E.C.
HENRY RUTTER, Esq., 4, Warrington-crescent, Hyde-park, W.
GEORGE SIMONS, Esq., The Lindens, Beddington, Surrey.

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SOLICITORS—Messrs. ALLEN and COLLEY, 8, Old Jewry, E.C.
SECRETARY—CHARLES W. CARPENTER, Esq.

OFFICES,—No. 9, KING'S ARMS-YARD, MOORGATE STREET, LONDON, E.C.

This company has been formed for the purpose of acquiring and working, by the aid of modern machinery and mining appliances, the rich silver-lead ore deposits of Pelidli, situated in Asiatic Turkey, about 28 miles south of Constantinople, and within 9 miles of the shipping ports of Touzla, Eski-Hissar, and Deridja, in the Gulf of Ismidt, where the ores can be shipped at all seasons of the year. The cost of transit to these ports, as stated in the reports of the mining engineers, will not exceed 10s. per ton. Contracts can be made for any number of tons the mines may produce.

The Pelidli property, through which runs a continuous stream of water, is very extensive, being nearly two miles long on the course of the lodes or veins, and about ¼ mile wide (see reports herewith). It is held under a firman or concession from the Imperial Ottoman Government, dated 9th July, 1864, which has, under the provisions of the new Mining Laws of the Empire, been extended by the Imperial Council of Mines for a term of 99 years from the 9th of June, 1869. The grant confers the right of working for silver, lead, copper, and zinc, at the very small royalty of 2 per cent. on the ores raised. The right of felling timber for use of the mines has been granted. The grant also embraces an extensive additional area adjoining Pelidli, of 6000 denums, or about 420 acres, upon the same favourable terms.

It will be seen by the reports of the mining engineers who have visited the mines that the several lodes or veins which traverse the property are of unusual size and richness, embedded in a limestone formation of the best description for the production of large deposits of silver-lead ore. The main lode has been cut into about 9 ft., carrying rich silver-lead ore throughout, and is pronounced by them to be one of the largest and richest silver-lead lodes ever discovered at so shallow a depth (only 15 fms. from surface); and, in addition to this large lode, there are others, the outcrops of which present indications of equal, if not superior, richness.

A large amount of capital has been spent upon the property in making roads and water-courses, in the erection of ore dressing-house, counting-house, and several houses for the accommodation of a large staff of miners; the sinking an engine-shaft from surface 15 fms., driving a 10 fm. level north about 12 fms. and south about 13 fms., and cutting through the deposit of silver-lead ore, which is proved to be of excellent quality. From the very limited extent of ground opened Mr. Fischbach, an experienced German mining engineer (who had charge of the works), estimated the ore discovered at 10,000 tons, from which 16 miners could raise 240 tons per month, sufficient to give a very handsome return upon the whole capital of the company. There is no doubt, after the erection of the necessary machinery, the shaft sunk, deeper levels opened, and the workings carried out upon a proper scale, the yield from one lode alone would reach, if not exceed, 1000 tons per month. Calculations based upon results already obtained show a profit varying from £5 to £10 per ton, according to the quantity of silver the ore contains; so that on a yield of 1000 tons per month even the minimum of £5 would give a profit of £60,000 per annum, thus surpassing the richest silver-lead mines of Great Britain.

Mining undertakings are usually attended with great risk and uncertainty, large sums being invariably laid out in seeking for ore, an operation generally extended over a period of several years; here the ores are already discovered in large quantities, and opened upon within 15 fms. of surface, where from 200 to 300 tons of ore per month can at once be raised for market, a most unusual result in any mine, either at home or abroad; large and continuous profits may, therefore, confidently be looked for within a period less than is usually occupied in conducting the preliminary explorations in most mining enterprises, and with an expenditure of capital exceedingly small compared with other mining operations.

The directors have received an offer from a responsible mining engineer, who has inspected the property, to contract for the delivery and erection of a pumping-engine and a winding-engine, with ore crusher complete; to erect engine-houses, boiler-houses, and other buildings; to put down the necessary pumping work and plant upon a scale equal to the requirements of the mines; to finish the machinery, buildings, and erections, and hand over the same in good working order within 12 months from the date of contract, on very advantageous conditions.

The terms upon which the vendor transfers the concession and mines are set out in an indenture between Mr. John Hornby of the one part, and Mr. John F. H. Read of the other part on behalf of the company. Under this agreement the vendor will receive a cash payment of £5000, and 35,000 shares in the company fully paid. The fact of the vendor declining to accept a larger cash payment sufficiently shows his confidence in the value of the property, and the large profits to be secured.

In the first instance the directors have decided to limit the operations of the company to the working of the mines upon an extensive scale, and shipping the ores to England; when the operations are extended, and the resources of the Pelidli property fully developed, it may be desirable to erect lead-smelting and silver-refining works, and to work the additional grant. Looking, therefore, to the future, the directors have decided upon fixing the nominal capital of the company at £100,000, in shares of £1 each, fully paid on allotment, but as the erection of the smelting-works, &c., will be deferred to a future period, they invite subscriptions from the public for only 35,000 shares, the holders of the first issue having the option of subscribing *pro rata* for any further issue that may ultimately be required.

This undertaking is introduced to the public as a *bona fide* investment. The directors have taken every precaution in investigating its merits, and from the high standing and practical experience of the several mining engineers, whose reports are appended, the large quantity of ore already discovered, the favourable position of the property, its proximity to England, the smallness of the working capital required, and the short time necessary to bring the mines into active operation, and effect large sales of ores, they confidently believe it will prove a highly valuable, safe, and permanently remunerative investment.

Prospectuses and forms of applications for shares, together with copies of the reports of the several mining authorities, may be obtained from the bankers, solicitors, and at the offices of the company. Copies of the Articles of Association, and of the following documents, lie for inspection at the office of the company's solicitors.

Firman under seal of the Sultan of Turkey, dated 1st September, 1864; four certificates under the hand and seal of Talaat Bey, President of the Imperial Council of Mines, dated respectively 17th of August and 9th November, 1868, and 28th May, 1869, old style; indenture dated 28th May, 1869, made between Thomas Swan Carabet Davoudoglu and John Hornby; indenture dated 24th June, 1869, made between John Hornby and John Francis Holcombe Read on behalf of the company.

The following are extracts from the reports of the several mining authorities who have inspected the property:—

Captain THOMAS RICHARDS writes—I can safely recommend this property to any parties who will lay out the necessary capital, being confident of successful and highly remunerative results, as this is unlike ordinary mining adventures, where large sums are almost invariably expended in sinking shafts and driving levels in search of ore. Here the ore is already discovered in large quantities, only 10 fms. from surface, and will be raised and prepared for market so soon as you can get the machinery to work. As I have before stated, this mineral vein is the largest and richest it has ever been my province to inspect at so shallow a depth. I look upon it as far beyond a mining speculation, and have every confidence in your realising great and permanent profits.

Capt. JAMES POPE writes—I beg to say, after a careful inspection, I entertain the highest opinion of the mines; I have had 50 years' experience as a miner, and for 30 years the management of mines. I have inspected nearly every mine of consequence in Cornwall, and a great many in Devon, and in all my experience I have never had an opportunity of inspecting a mine so rich at so shallow a depth, or showing prospects of permanency equal to this. There is ore enough in sight to give good profits, and after opening the mines to a greater depth, I feel every confidence the profits will greatly increase. This is not a speculation, but an investment of the first-class, and the capital required is small compared with mining generally; you have only to erect the machinery and lay out dressing-floors, and work the mines in an energetic manner, to realise large profits.

Captain JOHN VIVIAN writes—I must confess feeling surprised at finding such a lode; it is, without question, the largest and richest lode I have ever seen at so shallow a depth; and as it improves in quality and productiveness the deeper it is opened upon, it must, in my opinion, become a great and lasting mine, and I think I could with propriety guarantee to produce, from the ore already laid open, sufficient to give the proprietors from £800 to £1200 per month profit, and by pushing down the shaft and driving levels, there would be no difficulty in greatly increasing the profits. This would, of course, take time, but in less than two years from the commencement of the underground workings, it would be equal to, if not surpassing, the best mine in Cornwall. There are no works of magnitude to be carried out, and no great difficulties to be encountered. The ore is to be seen in the 10 fathom level and in the shaft, which does away with all risk, and there appears to be nothing wanting but a small capital to make this property all that can be desired. In conclusion, I beg to say my mining experience extends over a period of more than 40 years—for 10 years as a working miner, and for the last 30 years as an agent and manager of mines, and in all my experience I can confidently state I have no recollection of ever having inspected a mining property where so little has been done, presenting equal prospects of permanency and profit as the Pelidli Mines.

Mr. W. FISCHBACH writes—Extraction: In the shaft are to be seen two pillars of ore, of 20 metres in depth and 50 metres in length, of 1 and of 5 metres in breadth—that is to say, a mass of ore 6000 cubic metres, which contains about 10,000 tons of ore. In the extension of the galleries, such as they are at this moment, they could produce, with 16 miners, 240 tons of ore per month, and more. The number of miners could be augmented as they advance in the galleries, and increase in that way the production.

For full prospectus, and all further information, apply to the secretary, at the offices of the company, 9, King's Arms-yard, Moorgate-street, E.C.

TREATING LEAD ORES.—Mr. PAUL EMILE DE WISSOCQ, of Rue Richepanse, Paris, has patented some improvements in treating lead ores. The invention consists—1. In converting lead ores into chloride by treating them with hydrochloric acid.—2. In dissolving the chloride of lead in boiling water, and in putting the solution into contact with wrought or cast iron in the form of bars which decomposes it, precipitating the lead in the metallic state, and forming chloride of iron, which remains in the solution in place of the chloride of lead.—3. In collecting the precipitated lead, and melting it in a furnace or in a pot, and casting it into pigs.—4. When the mineral contains silver, in treating with a boiling and concentrated solution of salt the residue which is left after all the chloride of lead has been dissolved. The solution of salt dissolves the chloride of silver, leaving the other matters undissolved, and by the addition of metallic copper the silver is precipitated.—5. In collecting for use the secondary products, which are sulphuretted hydrogen and chloride of iron. These operations are, Mr. Paul Emile de Wissocq observes, separately, well understood, but they have never been combined for the practical extraction of lead from minerals containing it. In conducting these operations the following apparatus is employed:—First, a furnace, over which is placed a series of boilers, heated either directly by the fire, or better through a water bath. These boilers are connected with suitable pipes for filling them, for drawing off the contents, and for the escape of the sulphuretted hydrogen which is formed. The covers of the boilers should fit gas-tight, and through each an axis passes, giving motion to agitators within the boiler; there is also a pipe for running in acid. The pipe through which the sulphuretted hydrogen escapes leads to a vessel in which the gas is washed. Second, another furnace is employed, and over it is placed a boiler in which is put water and chloride of lead. At the upper part of this boiler is an upward-flow filter, through which the solution of chloride of lead passes, and filters before entering a large wooden vat, in which are placed wooden cages, containing bars of cast or wrought iron for the precipitation of the lead. The chloride of lead is decomposed, the metal being deposited upon the bars, and an elevator placed at the end of the vat takes off the water from which the lead has been separated and takes it into a reservoir, from which it returns whilst still hot into the boiler, where it is charged again with chloride of lead. From time to time the cages containing the iron bars are taken out, and the lead is cleaned off them. When the sulphuretted hydrogen cannot be used directly it is converted into sulphur in a large chamber or receiver, into which it is led by two different openings, by one of these two-thirds of the sulphuretted hydrogen produced enters, and by the other the remaining third, after it has been burnt so as to transform it into sulphurous acid. A jet of steam facilitates the action of the acid gas upon the sulphurretted hydrogen a reaction which produces steam and sulphur, which is deposited in a fine powder.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending July 4 was 11,952l. 7s. 2d.

Original Correspondence.

THE SOUTH STAFFORDSHIRE AND SHROPSHIRE COAL FIELDS—No. V.

EVIDENCES OF DENUDATION IN AND AROUND THE SHROPSHIRE, SOUTH STAFFORDSHIRE, AND SOUTH WALES COAL FIELDS.

SIR,—Your correspondent, "Salopian," of June 26, is wrong with regard to the coal at Harcott, in the parish of Chorley. He says the Harcott coal, with the exception of one 6 in. thick, is all smut. So far from its being all smut, the coal brought up when I visited the pits was a good bright coal, and the men told me that it was upwards of 5 ft. thick. It is known, also, as the "Five-feet coal" in the district, having been met with at other places; and a notable instance or two occurs, one near the Gib-house, where by means of an outburst of trap it has been trebled in thickness, by being folded over on itself, much to the astonishment of the finders, who fancied they had discovered a mine of endless wealth in a 15 feet of coal. In ordinary cases these coals lie so close together that two seams may be taken for one stratum. At Billingley, where they have been extensively worked, a thin bass, of only 18 inches in thickness, divides the two lower coals, as will be seen from the following section:—

1.—Surface soil.....	Yards	0	2	0	8.—Coal (good).....	Yards	1 0 0
2.—Clay.....		1	1	0	9.—Fire-clay.....		0 2 0
3.—Sandstone and Shales.....		33	0	0	10.—Shale		2 1 0
4.—Sulphurous coal.....		1	0	0	11.—Coal		1 1 0
5.—Shales & laminated sandstones.....		40	0	0	12.—Carboniferous shale.....		0 1 6
6.—Argillac. ironst. measure.		0	2	6	13.—Coal.....		0 2 0
7.—Shales and sandstone		10	0	0	Total.....	Yards	93 1 0

The Harcott coal, so far from being all smut, is the only good and sweet coal that we know of being worked in the district, and it was in search of the Five-foot Harcott coal, as we understand, that the Shatterford shaft was sunk, a section of which was given on June 19. *There are, however, two Harcotts*—that is, Harcott and Lower Harcott.

Your correspondent may be right or not in saying that "the calamincar found at the Old Park or Stirchley is the same as that which forms the brick and tile clay, or calamincar, of Broseley:" it is usually a blue, red, and yellow mixture; but at Pudley Hill, the Lawn, the Grange (Stirchley), and the Halesfield pits, Madeley, it occurs, we believe, not only beneath the brick-making clay, or "Brickman's measure," but beneath the Rough-rock, which varies from 15 to 50 ft. in thickness. It is worthy of remark that in the New Kemberton shaft the Brickman's measure is absent above the Rough-rock, and that a parting of 2 ft. separates the latter from 18 ft. of calamincar and rock of different colours, which would seem to indicate a rougher action of the waters of the period than is evidenced where these fine clays occur, and consequently a closer proximity to the trough of the estuary. It is equally remarkable, too, that although the fine sediments which form our brick and tile clays are here absent, and a coarser material substituted, the sulphur-coal, which is seen cropping out above on the face of the hill in both of the Coalbrookdale Company's clay works at Lightmoor, and which is found maintaining the same position either in one or more seams at Broseley, Stirchley, Dawley, Malinslee, and other places, is here found retaining its relative position above the rough rock, and beneath the next important rock in an ascending order, known as the Stinking coal rock. The following is the description of rocks occurring from the Stinking rock to the surface, as given by Mr. Scott, in shafts along a line from north to south:—

Strata.	Pudley Hill.	Lawn.	Wharf.	Cuxey's Coal.	Grange.	Halesfield.
	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.
6.—Stinking rock	49 0	44 0	43 6	61 6	60 0	49 6
5.—Blue clod.....	48 0	80 0	84 6	73 6	78 0	57 7
4.—Thick rock.....	51 0	62 0	62 3	69 0	72 0	90 4
3.—Sundry clods.....	115 0	53 0	—	48 0	45 0	64 1
2.—Top rock.....	24 0	57 0	—	27 0	24 0	27 0
1.—Sundry clods.....	48 9	3 0	—	54 0	15 0	138 0

If these sections are compared with that given of the Kemberton pits, June 19, of strata above the Top coal, the rapid increase of red rocks and shales will be seen. It is difficult, however, as admitted by "Salopian," to distinguish by the terms used, such as red ground, red rocks and marls, dark-red rocks, &c., the class to which they belong. The same may be said of some of the sandstones; but there is one, that referred to by your correspondent, which may be recognised by its position above a darker sandstone, full of round iron balls, about the size of peas. It dips beneath the former between the Hay, near Coalport, and Sutton Hill, where the calcareous conglomerate is seen coming out above some red and blue marls which intervene. The same sandstone occurs in a cutting of the railway not far from the Kemberton and Stafford pits, and would pass under the calcareous conglomerate seen in the turnpike road at Haughton, between Prior's Lee and Shiffnal, and that described in the Graville and Stafford pits as "magnesian limestone." That at Great Chatwell is, however, as your correspondent observes, marked on the map as occurring higher up. With respect to what he says about the younger coals, the difference between us is apparent rather than real, as he will find on referring to my letter in the *Mining Journal* of June 19, where, in speaking of the rocks found above the old line of denudation, I said—

"Although these upper rocks differ widely from the more productive group of lower coal measures, there is no difficulty in recognising them as members of a younger series, reconstituted out of the ruins of the older strata. The only questions are whether the upper red and purple rocks and marls are to be considered as belonging to the true coal measures, or whether they are mere attenuations of the Permians, and whether the lower members of the younger group might not be identical with those in which the Fungus coal and Upper Pennystone of the Lilleshall and Wombridge districts are found. If so, there is hope that the same important coal may be found extending further east, beneath the overlying red rocks, than has been anticipated."

Still the remarks he refers to hold good, in which it is said that the Permians, or red rocks hitherto considered as members of that division, come in one after the other, as the coal measures disappear, to fill up the valley of denudation. For whilst we get only attenuated lower or doubtful members of the Permians at Kemberton, we have from 400 to 600 feet of them in the next parish, about two miles south-east; whilst at Claverly and Enville we get 1500 ft. of them. In a line more direct east, scarcely a mile from the Kemberton pits, we find the lower soft, mottled red sandstone come in at the Hem Mill; and in the railway cutting east of Shiffnal, the next member of the bunter, the pebble beds or conglomorates are seen. The third subdivision, the upper mottled sandstone, occurs along the banks of the Worf, near Ryton, and the lower keuper, or water-stones, may be seen coming in above them at Beckbury, the next village.

There is no doubt about the upper coal measures occasionally passing into the Permians, as instanced in the *Mining Journal* of June 26, but even the upper coal measures have been so denuded that, as shown in the article just referred to, the Permian rocks rest sometimes on one member of the carboniferous series and sometimes on another, whilst in not a few instances, the whole of the coal measures having been so entirely swept away, they rest on the Silurians.

We very much question whether further investigation will not show that there has been even a second era of denudation, and a third series of coal measures; for at present we are unable to correlate these younger members of the coal measures on the east and those on the west, at Linley, Tasley, Westbury, Lebotwood, Ardwick, near Manchester, and the upper division of the North Staffordshire coal field. In the latter field my friend Mr. Ward has succeeded in tracing that singular bed of limestone which accompanies the coal seams above referred to, from Longton through Fenton to Shelton, and has also succeeded in finding the Spirobis Carbonarius, and other fossils which distinguish it, including some scales of fish. If we consider that these fragments of the younger coals are but indications of extensive mineral sheets once united and spread over the entire district indicated, the ravages committed by denudation are greater than we had depicted.

Mr. Hull has shown from his researches in connection with the Lancashire and Yorkshire coal fields that certain upheavings of the coal measures must have taken place along the Pendle range of hills anterior to the Permian period, that the whole of the upper, middle, and lower coal measures, amounting to 8400 ft., and some 1500 ft. of millstone grit in addition, had been swept away prior to their deposition on the denuded edges of the millstone series. In other places, and along the same range, Mr. Hull speaks of the denudation of nearly 20,000 ft. of vertical strata, an amount of materials at the waste of which, he adds, one feels as much astonishment as at the

gathering together of it. And if (as is most probable) this denudation took place in the interval between the Carboniferous and Permian periods, it cannot fail to impress us with the prodigious lapse of time, which is not represented by any known group of rocks.

Reflections such as these arise upon considering the vast extent to which the carboniferous series have suffered on the Shropshire, South Staffordshire, and South Wales sides of the old coal-producing area, for there seems really very little doubt of their having at one time been united. The entire country indicated has undoubtedly been modelled and sculptured into its present form by denudation; the action of such agencies may appear slow in comparison with the results accomplished, yet there is no reason for supposing that they were ever quicker in their action, or that they ever accomplished a larger amount of work in a given time. There is no reason, therefore for shrinking from the assertion which your correspondent hopes might be but a flight of fancy—namely, that we have evidence of the ravages of denudation, even in connection with our coal fields, over hundreds of square miles. J. RANDALL, F.G.S.

Madeley, July 5.

[Probably the errors in names of places and words, unfamiliar to the compositor, to be found in your correspondent's letter, will by this time have suggested to him that those he complains of in mine might have arisen from a different cause to the one he assigned.]

COAL IN NORTHAMPTONSHIRE.

SIR,—The question whether the coal-bearing measures of the carboniferous period would be met with by sinking through the oolites of Northamptonshire is one, doubtless, of great importance to the owners of property in that district, and would, if it could be answered affirmatively, soon lead to a material development of such mineral treasures. People who have never studied *geology as a science* look at the ascending series of strata, and infer that by sinking through the upper rocks when such appear at the surface, they shall find the older rocks lying *seriatim*, ignoring the fact proved by the most extensive evidence that some of the older measures have never been deposited at all, and others have been entirely swept away by the mighty agency of denudation. As bearing on this subject, let me call attention to the following extract from the "Coal Fields of Great Britain," by Mr. Edward Hull, of the Geological Survey:—

"It has already been shown that the coal measures of England thin away, and ultimately die out, towards the South-Eastern Counties, and also that most of the region lying between Staffordshire, Warwickshire, and Leicestershire on the one hand, and the valley of the Thames and Channel on the other, was dry land during the period of the productive coal measures, and *is, therefore, destitute of coal.* So that if this district, stretching eastward to the sea, and southward to the Thames, were stripped of its covering of cretaceous, jurassic, and triassic rocks, we should, in all probability, find a bare tract of Cambrio-Silurian slates and porphyries."

The italics are the authors. Mr. Hull is too scientific a geologist to hazard such an assertion as this without good evidence, and I would recommend the study of his little work to all those who are interested in this important question of the extension of our coal fields under the secondary rocks of the Midland Counties.

Dudley, July 5. W. MADELEY.

GEOLOGICAL NOTES ON COAL—No. VII.

SIR,—The valuable products of coal are not exhausted by the enumeration given in our last article. Another product has been obtained from gas-tar, called carbolic acid, which is noted for its antiseptic properties. We should think that the ancient Egyptians would have been glad to know this substance for their embalming purposes. A remarkable instance of its capability in preventing putrefaction is put on record by Prof. Calvert. A Mr. Clift dipped the leg of a dead horse in this acid, and exposed it for six years to wind and weather, and he found at the end of that period that it was as fresh and sound as the first day on which it was exposed to the air.

Again, the magic hand of chemistry has actually extracted rich and beautiful dyes, which are noted for the permanency and the beauty of the tints they impart, from this gas-tar. It is said that when silk and wool are properly dyed with carbonazotic acid, a product obtained from the tar, shades of yellow are produced which no other substance can give with the same durability; that the only other substance which will yield that colour is tumeric (the root of an East Indian plant), but which is liable to fade by the light and by the perspiration of the body. But the yellow which gas-tar gives is glorified by the light of the sun, and undimmed by the perspiration of the body. The colours which have their origin in coal-tar are known by the names—aniline purple, tyrian purple or mauve, violine, roseine, fuchsine or magenta, solferina, bleu de Paris, aniline green or emeraldine, azuline, pittacal, &c.

But another of the discoveries of chemistry is the manufacture of the most flagrant scents, the greatest variety of odorous essences from coal-tar. The young lady arrayed in her ball-room dress, with her finest cambric pocket handkerchief in her hand, perfumed with the celebrated "millefleurs," would be astonished, perhaps shocked, if she were told that she positively carried the product of coal-tar about with her. But startling as the information might be, it would nevertheless be an undeniable fact. It may seem strange that from this black compound, which is so offensive to our nasal organs, chemistry can really manufacture the sweetest scents. But strange as it may appear, it is a positive chemical fact.

Lastly, alcohol is mentioned as one of the products of the Boghead coal, and is said to be more stupifying in its effects than that extracted from malt. Now, as we have an amply supply of this fiery element for all needful purposes, we shall vote that the coal keeps its alcohol undisturbed, and, instead of inflaming our tongues and stomachs with it, we turn it to illuminating and heating purposes.

Still this enumeration does not exhaust the stock of the useful products of coal which the wondrous power of chemistry has discovered and applied, but it is neither necessary nor desirable that we should add to the list. Sufficient has been said to show that from coal alone we derive warmth, light, easy motion, beautiful dyes, and rich perfumes. And what more do we require? In fact, there seems to be no end to the solid, liquid, and gaseous things which the chemist can call forth from this black, compact substance, disinterred from the bosom of our venerable Mother Earth.

In bringing these cursory notes to an end, we would ask our readers—Has the idea never flashed across your minds that there has been a wise and benevolent forethought in storing away the old forests for the use of man, the crowning form of created existence? We have no desire unduly to increase man's importance, and to make him the measure of all things, but we cannot avoid entertaining such a view. When we consider this coal question in all its bearings—when we remember the way in which the coal beds are placed in the earth's crust, and rendered accessible to man's reach—when we reflect on the constant stream of benefits flowing from these coal vaults—we cannot help thinking that the formation of coal was no haphazard occurrence, no chance movement, but brought about by the agency of laws now in operation with no less a design than to promote the welfare of creature man. If this be true, and the opinion seems to be confirmed by other evidence, there has been a Providence caring for mankind millions of years before the first man stood erect in this creation. The first coal-making plant that waved in the breeze was prophetic of the coming man. Our notable warrior vessels, with their iron-clad sides, and our steam horses that whirl us with astonishing rapidity over the earth's surface, were shadowed forth when the first vegetable mass was resolved into coal, and the first layer of ironstone was deposited. In short, every day of our lives we are using materials, we are taking benefit of arrangements, which myriads of ages ago were formed and appointed for our advantage.

But it is certain this valuable mineral cannot last forever at our present rate of consumption; for we are now removing annually more than 125,000,000 of cubic yards of this black substance. We need not, however, fret ourselves on that head, for the bank will not stop payment for many precious years—perhaps for hundreds of years; and before the last ton is extracted in the British dominions progressive man may possibly learn to do without it. No doubt, as the world now goes, deprived of this treasure our sea-girt isle would be shorn of her commerce and manufactures, and descend to a low figure in the scale of nations; and perhaps in due time the New Zealander, of whom Lord Macaulay graphically speaks, would be able to seat himself on a parapet of Westminster Bridge, and muse on the ruins of the once mighty London. But that dismal catastrophe will not happen yet awhile, at any rate; and before British strata are entirely exhausted of this product something may be discovered to take its place, so that Macaulay's dark but striking picture may never become a reality.

But our commercial greatness does not altogether depend on our command of coal. Iron and limestone have contributed no small share in enabling Britain to take the highest position in the production and manufacture of all metallic goods. If any of the three were lacking or scarce our greatness would be sensibly crippled. Coal cannot say to the iron ore "I have no need of thee;" nor can the coal and iron ore assume an independent position, and disdainfully say to the plain limestone "We can dispense with thy services." Without iron, the coal would be mainly confined to its use as an article of fuel; and without limestone, the iron could not well be separated from the earths with which it is connected.

Hence the useful combination of these three mineral substances in a nation's prosperity. But our concern at present is respecting coal. If this black substance should still remain a necessity of our civilisation, perhaps our American cousins will supply our wants, when our store is exhausted, from their extensive coal fields. At any rate, while this mineral boon is ours, it is our duty to the Giver of all good, our duty to posterity, not to waste it, but to use it with judicious care, and by its aid to help on mankind in their glorious and unceasing march to truth, happiness, and prosperity. M. A. MOON, F.G.S.

[This series of papers on Coal are the substance of a Lecture delivered to an audience of working men, at Whitehaven; and are forwarded for publication in the Journal, in the hope that they may be of use for a similar purpose in other districts.]

MINES INSPECTION.

SIR,—The public in this district take great interest in this subject, and the proposal made by Mr. Plant, whereby a real inspection of mines will be obtained. All who know Mr. Plant agree that he is the proper person to take this problem in hand; and, judging from the framework for an Act of Parliament which he has drawn up, and the way in which he has provided for its working, with his reply to the strictures published in your Journal, must convince those who do not know him that he is the man for the work.

Soon after the first Fern Valley Pit accident, in which so many lives were lost, Mr. Plant stated, in the presence of myself and others, that if the Ferndale Company went on again with their crop workings before they had an air-pit in the crop, and an air-way drawn into their crop workings from it, they would have another wholesale slaughter of men, which prophecy has since been sadly realised.

Mr. Plant considers that the Bill now before Parliament will be of little service unless under it a close and frequent inspection of mines takes place; and that where mines of a fiery nature are steep, it should be compulsory on the owners to put an air-pit in the crop.

Mr. Plant's principle is that "prevention is better than cure," for while the former may be done, the latter can never take place under the present system—for the inspection of mines does not commence until the victims of the accident, which caused the inspection, are past all human aid.—*Kingswinford, July 8.* A MINER.

THE DURATION OF OUR COAL.

SIR,—I notice occasionally some discussion in your valuable Journal in regard of the duration of coal in this country (I mean in England, Wales, and Scotland), and have not seen very satisfactory data given on the subject. Some say that the quantity yet not worked is almost inexhaustible, while others assert that it will not take a very long period to get out all the workable veins, allowing, as it is generally admitted, a loss of 50 per cent. in the working of it, and the quantity left behind in veins, from 3 in. to nearly 12 in. thick each, will not be remunerative to any parties to work them (especially those veins which are very deep, and having bad tops), at the present prices given for steam and house coal, and also for coal fit for iron-smelting purposes. I am a Monmouthshire collier, and as such feel a little anxiety to know the true result of the investigations of the different mining engineers, who were, as I understood, employed in getting up a report on the subject. Doubtless it would be very satisfactory, and highly interesting, to a very great number of your readers, as well as myself, and also to other inhabitants of the counties of Monmouth and Glamorgan, especially to those who are interested in the iron, coal, railway, and dock properties of the said two counties, if some correspondent could furnish, through the Journal, a statement of the probable duration of the coal field of the said counties, distinguishing the quantities thus—

1.—The quantity of coal in veins from 3 in. to 12 in. thick each.

2.—The quantity of coal in veins above 12 in. thick each, fit for steam and house coal only.

3.—The quantity of coal in similar veins, fit for iron-smelting purposes.

The three quantities to be given after deducting, in both instances, 50 per cent. for the loss in getting. A MONMOUTHSHIRE COLLIER.

THE CHANNEL TUNNEL.

SIR,—Referring to the application recently made by the promoters of the Channel Tunnel for a Government guarantee on 2,000,000*l.* sterling, for the purpose of making experiments to test the practicability of boring a sub-marine tunnel under the Straits of Dover, I beg to draw your attention to a statement which appeared in the *Moniteur* of June 30, a translation of which I enclose, containing some facts which I think are not generally known to the English public.

HENRY STEAD, Sec.

Translation of a statement which appeared in *Le Moniteur Universal* of June 30, 1869:—

"Several English papers have announced that Mr. Bright, the English President of the Board of Trade, has received a deputation of the promoters of a proposed sub-marine tunnel under the Pas de Calais (Straits of Dover), who stated to him that the Official Commission of Engineers, appointed by the French Government, had reported favourably on the scheme, in consequence of which the promoters ask the two Governments to guarantee them 2½ per cent. upon the 50,000,000 frs. (2,000,000*l.* sterling) which the preliminary experiments connected with this project are expected to cost. The Commission declared in effect that the construction of a tunnel would not be impossible, without offering any opinion as to the outlay of time and money involved, and supposing there were no percolation of water. The promoters have made use of this declaration to ask for a guarantee of interest, but in its later meetings the Commission completely rejected this demand, and it is difficult to imagine that the Government would be disposed to authorise an outlay of 50,000,000 frs., which would be 25,000,000 frs. (1,000,000*l.* sterling) for France to make experiments on this project, which, even if it could be carried out, would be open to great objections. This scheme, besides, is no other than that of Mons. Thomé de Gamond, which was rejected 12 years ago, because the Commission declared, before offering an opinion, that it would be necessary to expend 500,000 frs. (20,000*l.*) in preliminary experiments; it is clear, then, that an outlay a hundred times larger for the same purpose would not be authorised unless success were absolutely assured."

FAHLERZ AS A SILVER ORE IN ENGLAND.

SIR,—In last week's Journal I observe a letter from Dr. Phipson, on "Fahlerz as a Silver Ore in England," and as I have now been some time engaged in working mines in Cornwall containing such ores I am induced to send you the following remarks. The occurrence of true silver fahlerz ore—that is, the highly argentiferous varieties of the mineral species tetrahedrite, known by the names of freibergite and polytelite—in Great Britain was announced by Mr. D. Forbes, F.R.S., in his "Researches in British Mineralogy," Philosophical Magazine, November, 1867, and March, 1868, where specimens are described containing respectively 13·57 and 11·25 per cent. metallic silver. Similar ores from Cornwall were subsequently noticed by Mr. Davies, of the British Museum, in the Geological Magazine of December, 1867; and samples from Lostwithiel, examined by Prof. Church, are stated, in the Geological Magazine for February, 1868, to have yielded respectively 7·23 and 10·45 per cent. silver. As it is a well-known fact that most, if not all, fahlerz ores contain some silver, the remarks of Dr. Phipson would by practical men scarcely be applied to true silver fahlerz, since such small amounts of silver per ton as he alludes to are frequently found in the ores which do not even merit the appellation of true silver ores.

The mines which I am at present working are those of Bounds Cliff and Treburget, situated respectively in the adjoining parishes of St. Teath and Endellion, in the north of Cornwall. The silver ore from both of these mines is dark argentiferous fahlerz (a true freibergite or polytelite), and has been analysed at my request by Mr. David Forbes, F.R.S., who found the clean Bounds Cliff ore to contain 9·8 per cent. silver, or 3202 ozs. per ton; and the Treburget ore (which frequently occurs in small trilliant tetrahedron crystals), 9·96 per cent., or equal to 3253½ ozs. of fine silver to the ton; the silver contained some gold. The galena and copper pyrites associated in the same lodes also contained silver, even when perfectly free from any admixture of silver ore, a sample of the clean galena from Treburget Mine yielding 69 ozs. to the ton, whilst the copper pyrites from the Bounds Cliff lode contains 32½ ozs. per ton of ore.

As the occurrence of true silver ores in England is one of considerable scientific interest, I shall be happy to give an order to visitors to enter and inspect the mine. Samples of the silver ores may be seen at the offices of Messrs. Tilly and Co., 1, Circus-place, London Wall.—6, *Crown Office-row, Temple.* T. A. MASEY.

P.S.—The name polybarite used in Dr. Phipson's letter is, probably, a mistake for polybasite, which is not a fahlerz, nor is regarded by Greg and Lettsom, or other authorities, as an authentic Cornish mineral, notwithstanding the analysis by Joy, which is cited by Dana, which must, therefore, be looked upon with the suspicion which minerals procured from mineral dealers or other interested parties are justly entitled to.

ROYAL SCHOOL OF MINES—THE LECTURES.

SIR,—May I request, on behalf of the students here, the insertion of the enclosed remarks. We have long thought that as many second-rate educational establishments have obtained a notice in the columns of the press, it would be only fair for a School which gives a practical scientific education—probably the best in the kingdom—to have the same. Again, while the list of our professors includes names so well known to the public (as W. W. Smyth, Percy, Huxley, Frankland, &c.) as most eminent authorities in their respective departments, the School with which they have been connected, and in whose theatres they have lectured for many years, is almost quite unknown to the public. If, therefore, you would kindly put an end to the anomaly, by inserting the enclosed notice, you would directly oblige my fellow-students and myself, and at the same time indirectly inform your numerous readers that this country, so rich in mineral wealth, has a School of Mines. FREDERIC JAMES M. PAGE.

Jermyn-street, Piccadilly, July 7.

[We insert the letter of Mr. Page, but he must know that the Lectures on Mining have been regularly published in the Journal. The last of the series appears in the Supplement of this week.]

ROYAL SCHOOL OF MINES, JERMYN STREET.

At a meeting of the Council, on Saturday last, the results of the examinations for the past session were declared. The following gentlemen, having passed the requisite examinations, have obtained the title of "Associate of the Royal School of Mines" in the divisions mentioned:—

BELL, metallurgical.	G. GREEN, metallurgical & geological.
G. BROOME, mining and metallurgical.	M. F. MAURY, mining and metallurgical.
L. BROWN, metallurgical.	F. J. M. PAGE, mining and metallurgical.
— BUTLER, geological.	— TAYLER, metallurgical.
R. J. FRECHEVILLE, metallurgical.	

The following prizes and scholarships were awarded:—

Two Royal Exhibitions of 15*l.* for first-year students—1, J. J. BOWREY; 2, W. GOWLAND.
H.R.H. the Duke of Cornwall's Scholarship of 30*l.* for two years—W. J. SOLLAS.
Royal Exhibition of 25*l.* for second-year students—W. GOWLAND.
De la Beche Medal and Books for Mining—G. BROOME.
The Director's (Sir Roderick I. Murchison) Prize for Geology—W. GOWLAND.

We also append the full lists for Mining, and its kindred sciences, Metallurgy and Applied Mechanics:—

APPLIED MECHANICS.

Maury—First class.
Page ,,
Renwich ,,
Brown* ,,
Bayly* ,,
Frecheville* ,,
Martin* ,,
Wilkinson* ,,
Williams* ,,
* Equal.
Douglas—Third class.
Exam.—T. M. Goodeve.

MINING.

Broome—First class.
Maury ,,
Page ,,
Wilkinson—Second class.
Williams ,,
Terry ,,
Butler—Third class.
Exam.—W. W. Smyth.

METALLURGY.

Frecheville—First class.
Broome ,,
Page ,,
Green ,,
Maury ,,
Brown ,,
Taylor ,,
Bell ,,
Jones—Second class.
Martin ,,
Examiner—J. Percy.

MINING IN CARDIGANSHIRE.

SIR,—We read in Sacred History, "Where thy treasure is, there will thy heart be also." I cannot say that my earthly treasure will be found eventually under the Cardiganshire turf; although I have had a fair share—sufficient to keep the wolf from the door—yet my heart has been for a series of years, and still is, in Cardiganshire mining. I was pleased to read the remarks of "A Well-Wisher," in the Journal of June 19, as I felt convinced that he knew the ground he trod on, even by enumerating the different names of the old mines in connection with their new names. Capt. Trevethan, jun.'s, letter, of a subsequent date, canters over the ground as lightly as if he were a yearling, instead of an old rust. It gave me pleasure to trace his ideas, though I regretted that he did not touch a little on the young and promising mines, on his aerial visit, ere he fell on Bronfloyd and West Bronfloyd; but, being quick in discernment and temper, his thoughts must have no sooner been there than he dropped his pen on the paper, and began to eulogise these mines. Yet there are many promising mines, and such as will do well if persevered with in a practical sense—*i.e.*, managed by men of skill, who give it their study and entire support. In "A Well-Wisher's" letter he says—"During a period of twenty-five years' residence in Cardiganshire, I have known all the present dividend mines to have been abandoned on account of poverty, resumed, and many new-named." I know he is of my opinion, that practical men—men who give it their study, and men who are able to do so, being taught from the cradle—are now the managers of these mines. It would serve the former agents right if I were to give their names, but their conscience should now prick them.

Bronfloyd, indeed, is a mystery to some of the readers of the Journal, but not to men of that discretionary qualification essential to the working and bringing to a satisfactory issue the mines of Cardiganshire. I do not know of a single foot of ground within a radius of several miles of the mines in the district but is secured for further researches; but let me do justice, and add—by practical men, men who appear to be indigenous to the mineral kingdom, and who, with their successive generations, will be taught the various improvements, and still improve knowledge to make mining a greater certainty, for Cardiganshire is yet in its mining infancy.

A little over 20 years ago I played with my fellow schoolboys on the green hills where now is to be heard the jigging-machines, the flap of the water-wheel, or the smoke of the chimney seen from the fire-engines. Cottages, too, and well cultivated gardens, fill the places of the stunted oak. Upper Cardiganshire is prospering by the sole cause of a few hardy, honest, hard-working practical mining men. I wish them every prosperity, and the harvest, followed up, must be startling.—*Goginan, July 7.* A. B.

MINING IN CARDIGANSHIRE.

SIR,—In my last letter, with reference to mining in this county, I had not sufficient time other than running over the names and situations of the different mines on the route from Llanidloes to Aberystwith. Plynlimmon is the most eastern mine in the county: the captains' reports speak of it, doubtless, better than I know it, so we will leave it alone for the time, and begin with the Esgair Lee, next in rotation. In my last this mine was spoken of as being worked by a gentleman from Birmingham; but you must understand, although called Esgair Lee, that it is not the old mine which was formerly worked, and that made such good returns, but one immediately to the north-west, just over the water brook. The old mine is now taken up by a party of whom you read in the Journal a fortnight since, and although only 30 fms. deep, yet, like many mines in the country, ceased working for a time. Why no one can now, perhaps, tell: they are not on the same lodes with each other, although closely parallel. There are other mines south of this valley running from the Old Cwmystwith Mine (so well known in mining history)—the Lisburne Mines, West Cwmystwith, Ty-Gwyn, Dolwen, &c., almost a host too numerous to mention—which brings one into the Rheidol and Ystwith valleys. But to return to the before-mentioned route on to the Ponterwyd mining district. Those amongst them of any note are the Powell United Mines, the Llawany, Bwadrain, &c., which are really good mines, and, no doubt, ere long may fairly be classed amongst the best of this county's young mines, although worked as the Powell United some 70 or 80 years ago, and abandoned, but taken up by my father some six or seven years ago, and now looking remarkably well. There is another old mine about this neighbourhood, perhaps a little further south. The celebrated Van lodes are supposed to traverse the county, running pretty near the Ystymtean district, a little to the south of the above-named mines, and crosses the Rheidol Valley. I hope it may be found to flourish in this part of the world as it does at home; it is as much wanted by the working miner as by the speculator. We next come to the Goginan Mine. Almost everybody has seen or read of the Old Goginan, which made such profits for years, and, like others spoken of above, was allowed to slumber for awhile, but at last Messrs. Taylor and their men awoke to life, and put fresh armour on in the way of money, since which time hundreds of tons of rich silver-lead have been raised, and, from present appearances, as one may judge from a lode in the 100 fathom eastern level, worth 2 tons per fm., with such a back under a mighty hill as may lead one to suppose that its best days are in store. I hope they are, not only for the spirited shareholders, but for the county. There is another old mine, to the west of which there are no mines upon the run of its rich lodes as yet, but time and skill, with money, bring many things to pass. We will now run over to the east and north of Goginan, where the Bwich Consols, Cwm Erfin, Cwm Sebon, Darren, the Old Cwmsymlog, &c., are to be found, but of those mines I can add nothing to their advantage, other than saying they, with their agents, deserve every praise that captains generally get in good, profitable, and paying mines.

These mines are good, and now, in conclusion, I must mention the two most western mines in the county, and though last, not least, the Bronfloyd and the West Bronfloyd Mines, being assured that the former has not its equal in the county; its character is spoken of by parties more fluent in pen and speech than I am. All I can say is this—I am proud that I have one (the latter mine spoken of above) so closely attached to it, and, although as young as West Bronfloyd is, yet it has every indication of becoming as good a mine as its easterly neighbour. They can both boast of having the same parish road for the boundary, and the richest part of the Bronfloyd Mine (dipping, as its riches are, to the west) is within 200 fms. of the boundary. A greater prize of a mining sett is not to be met with again in the county—a beautifully sloping piece of ground

from the hill on the southern side down to an over-supplying crystal stream of water, and from this stream a cross-cut has been commenced, driving north to intersect the Bronfloyd lodes, which have been seen in the fields above, of a most promising character.

It is the intention of the present proprietors, father and son, to offer a part of this mine to any gentlemen who may feel interested in becoming speculators in this our county. Truly speaking, the West Bronfloyd Mine can scarcely be thought a speculation, but an almost certainty of becoming a profitable concern. It is about four miles east of the town of Aberystwith, and about two miles from the Bow-street Station, available to all parts of the kingdom; also about two miles to the west of Old Cwmsymlog Mine, of which Black's Guide through Wales says—"In mineral treasures few counties in the kingdom are so rich." And speaking of the Old Cwmsymlog, he says—"The immense fortune that Sir Hugh Myddelton expended in forming the New River, near London, is well known to have been acquired from the Old Cwmsymlog Mine. Yet this, and many others which have been successfully opened, had been long neglected. Until within the last few years, however, more attention has again been directed to the mines, more copper, lead, and silver ore have been raised, and there needs but the employment of more capital and more energy in these works to render Cardiganshire one of the most valuable mining fields in the kingdom." So much, then, for the old mines of Cardiganshire. But the mine of which I speak—the West Bronfloyd—is an entirely new piece of virgin ground; although sought after by many, yet never before worked. S. TREVETHAN, Jun.

Penllwyn, Aberystwith, July 7.

Meetings of Public Companies.

COLONIAL BANK.

The sixty-third half-yearly general meeting of shareholders was held at the London Tavern, Bishopsgate, on Tuesday,

Mr. CHARLES MARRYAT in the chair.

Mr. C. A. CALVERT (the secretary) read the notice convening the meeting, and the subjoined report of the directors:—

The directors submit to the proprietors, in accordance with the provisions of the Charter, the following statement of the debts and assets of the corporation on Dec. 31, 1868, which also exhibits the net profit made during the half-year ending at that period:—

DEBTS.

Circulation	£	288,155	12 6
Deposits, bills payable, and other liabilities		2,008,759	6 1
Paid-up capital		500,000	0 0
Reserved fund		140,000	0 0
Balance of profit from last half-year		3,390	15 3
Net profit for the half-year		36,791	0 2
Total	£	2,977,096	14 0

ASSETS.

Specie	£	191,618	12 0
Due to the bank in the Colonies on bills discounted and purchased (including those past due), &c.		1,459,115	10 10
Due to the bank in the Colonies on current accounts		20,849	19 4
Due to the bank in London on bills remitted, cash at bankers, &c.		1,296,136	5 5
Bank premises and furniture in London and in the Colonies		9,326	6 5
Total	£	2,977,096	14 0

The directors are glad to inform the proprietors that at the latest dates in their possession the current business at the branches was proceeding satisfactorily. As the usual period of three years has elapsed since they last presented a gratuity to the officers and clerks of the establishment, the directors have again awarded them 10 per cent. upon their salaries, which they feel confident will be approved by the proprietors. Deducting this gratuity, which amounts to 2881*l.* 2s. 6d., from the net profit declared above, after providing for all bad and doubtful debts and income tax, there will remain £33,909 17 8

Add balance brought from last half-year 3,390 15 3

Gives for division £37,300 12 11

Out of which the directors recommend that an ordinary dividend of 6 per cent. (being at the rate of 12 per cent. per annum), and an extraordinary dividend of 1 per cent. upon the paid-up capital of the corporation, be made for the half-year ending Dec. 31, 1868, which will together require 35,000 0 0

Leaving £ 2,300 12 11

To be carried forward to the next half-year.

The CHAIRMAN remarked that as their able secretary, who had had so much experience in connection with the preparation of reports, had been unable to find anything to say beyond communicating the figures, the proprietors could readily suppose that he would have very few observations to make. As they showed a profit rather less than last year he might, however, explain that upon making their usual periodical examination of accounts they found that one or two at St. Thomas's had not turned out so well as was expected, and the directors thought it best, following their invariable custom, to provide for them at once. (Hear, hear.) With regard to the small addition to the item for bank premises and furniture, it arose from the re-building of the house at St. Kitts, which it would be recollected had been destroyed by fire.

Mr. HARRIS enquired whether the person through whose errors of judgment considerable loss had accrued to the bank some two years since had participated in the distribution of bonuses mentioned in the report.——The CHAIRMAN said the person alluded to had not—in fact, he had not been in the service of the bank for a year and a half, having left very shortly after the occurrence.

The resolutions for the reception and adoption of the report, and the declaration of the dividends, were then unanimously carried.

Mr. HARRIS moved, and Mr. JAMES JAMES seconded the motion, "That in future the gross profits be stated as well as the expenses."

A SHAREHOLDER observed that if Mr. Harris could but appreciate the extent to which the acceptance of such a proposition would militate against the best interests of the bank he was sure he would withdraw it. He had himself the utmost confidence in the directors, and he was sure that similar feelings were entertained by everyone in the room.——The CHAIRMAN thought it would be very undesirable to publish such detailed accounts as the proprietor who had proposed the resolution seemed to wish for. They had gone on for 30 years as at present, and had done well, so that he could not see the necessity for changing it.

The motion was then withdrawn, and thanks having been voted to the Chairman and directors, and acknowledged, the meeting separated.

LEAD MINING IN WALES.

THE CAPEL BANHAGLOG (EAST MID-WALES) LEAD MINING COMPANY.

[FROM OUR OWN REPORTER.]

The first annual general meeting of this company was held on the mine, on Tuesday. Previous to the commencement of business the shareholders, accompanied by Mr. Job Taylor, J.P. (Mayor of Dudley), the Chairman; Mr. Ross (Messrs. Ross and Co.), manager; Capt. John Kitto (local manager), and Capt. Samson Kitto (resident agent), walked over the sett, and inspected the different points of operation.

Among those present on the occasion were—Mr. Job Taylor; Mr. Ross, London; Mr. Crump, Margate; Mr. Newby, Peckham (directors of the Mid-Wales Lead Company); Major Boyle, Capts. Kulbach, and Handley (directors of the Capel Banhaglog Company); and Mr. John Owen, director of Brynpostig Mine; Mr. W. A. Browne, director of New Brynpostig Mine; Rev. T. Jones, vicar of Llanidloes; Dr. Davis, Llanidloes; Mr. Eykyn, banker, Llanidloes; Mr. Davies, Cross Farm, and several other of the principal inhabitants of Llanidloes. The following shareholders in the respective mines were also present:—Messrs. Llewellyn, of Liverpool; Adam, of Mirbank; Cotterall of Chester; Kirke White, of Killerney; Rev. John Smith; Rev. John Beresford; M. Humble, J.P., of Denbigh; Rev. J. Sutton, of Laygh; Edward Humble, of Vicar's Cross; J. G. Bissell; J. Killey, of Rainsay; J. Fraser, of Camborne; A. R. B. Knight, of Ludlow Castle; Capt. Samson Kitto, Capt. John Kitto, Capt. Barkell, Mr. Hughes, Mr. Webb, Mr. Terry, of Dudley, Mr. Jones, and many other shareholders in person and by proxy.

The chair was occupied by Mr. JOB TAYLOR.

The notice convening the meeting was read.

The report of the directors stated that during the past year steady and satisfactory progress had been made with the works, all the machinery would be completed in a few weeks, and the sinking of the engine-shaft below the adit level would then be resumed. Public attention being at the present moment so strongly directed to the neighbourhood in which this mine was situated, owing to the wonderful success which was attending the development of the Van Mine, the directors thought it as well to recall attention to a late report by Capt. J. Kitto, when he first struck the lode in the deep adit level—that it was "the best discovery he had yet seen in the district." It was satisfactory to find that his original good opinion remained unaltered, and that the property bids fair to become second to none in the now celebrated Llanidloes district.

The report of the local manager (Capt. John Kitto) stated that the underground workings, since the last annual meeting, have been more particularly confined to the driving of a deep adit level from the river side on that part of the company's property known as "Old Chapel," and to the sinking of shafts for ventilation, and for the deeper development and proper opening out of the mine. The adit level has been driven on a course of lode about 70 fathoms, and for the whole distance the lode has been strong, and of a decidedly favourable character, varying in width from 2 to 8 ft., and yielding occasionally excellent lead ore; in one place—more particularly near the site of the present engine-shaft, they passed through a nice bunch of ore, from which some beautiful lead stuff was raised, and is still on the bank, but being only about 15 feet below the surface, of course, little or nothing can be expected from above this level, but on reaching the next level, 12 or 15 fathoms deeper, for which they have commenced to sink, he fully anticipates having some good paying ground. The lode in the present end of the adit level above referred to is from 3 to 4 feet wide, of a very promising character, and yielding a little ore. The new engine-shaft has been sunk altogether from surface about 9 fms., 16 feet of this being below the adit level; at this depth they got to the level of the river, and the water became so very quick that they had to suspend the sinking for a few days, until the pumping-machinery was set to work—this is being prepared as fast as possible, and will be ready to work by the end of next week, when the sinking will be immediately resumed. They have sunk another shaft 7 fathoms from surface, about 50 fathoms to the west of the engine-shaft; this is intended for a drawing shaft, and for ventilating the mine, and this they were also compelled to suspend on account of the water, but as the deep adit level is now very nearly driven up to this point he expects the water will shortly be drained, when a communication can be easily effected. They have completed the wheel-pit, and are now erecting a 30-ft. diameter water-wheel for pumping and drawing, which will be at work next week; they have also cut a water-race upwards of 300 fms. in length, and are now making a large reservoir, which will be completed in a few days. The surface erections consist of smiths' and carpenters' workshops, store-room and office, all well and substantially built, and covered with the best material, and will be found quite equal to the requirements of the mine for many years; altogether, he considered the prospects to be very encouraging, equal to almost any young mine in the same stage of development, and very superior to many others, and should the lode continue to improve in depth, as from its general appearance in the adit level there is every reason to anticipate, they will undoubtedly have a productive mine.

The report of Capt. James Nancarrow (consulting engineer) stated that the adit level has been driven east from the Mid-Wales side from 20 to 25 fathoms; here the lode is large and well defined, but not so highly mineralised as on the other side of the hill. In the eastern part of the mine the adit level has been driven west about 70 fathoms. In this level the lode is large, and of a most promising character, and in places it has produced some good stones of lead; in fact, he has never seen a better sample of ore in the locality than from this place. This level must be continued on into the hill, and as you get depth you will most certainly get ore. The new engine-shaft has been sunk 3 fathoms below the adits on the lode, but it is now suspended, owing to an increase of water, but he saw some very good stones of ore said to be taken from the bottom of the shaft, and when they get the wheel to work they will soon get some depth, and it is in depth that they have to look for large deposits of ore. There has been a shaft sunk about 7 fathoms deep to the west of the engine-shaft; and here also the lode has a fine appearance. The wheel-pit is completed, water-race made, and the reservoir will be finished in a few days. The wheel will be fixed with rods, pitwork, &c., very shortly, and when that is done the sinking of the engine-shaft will be resumed, and they will soon get down for another level. Since his last inspection of the mine he is very pleased to see such marked improvements, and he has little doubt, if they carry out the work that they have in hand with energy, that in a very short time they will have a remunerative mine.

The CHAIRMAN said he had much pleasure in meeting his co-shareholders upon their property, because it afforded him an opportunity of congratulating them upon the satisfactory progress that was being made in its development, and also upon the unusually favourable indications presented, considering the comparatively limited extent to which the operations have as yet been carried. (Hear, hear.) Such, indeed, were its general appearances that he did not hesitate to say that they most favourably compared with the now celebrated Van, when that mine was in its infancy. He had been mining in this district for many years, and in other parts of the country from his boyhood, and he wished to take the present opportunity to state that he was not only much pleased with the prospects of their property, but shareholders might rest perfectly satisfied that all the work had been well and economically done. He challenged anyone to say with truth that a similar amount of capital could have been more advantageously expended; and all he, in conclusion, could say was that he believed the time was not far distant when they would have to congratulate each other upon being the possessors of a remunerative property that would progress in richness as its development was extended. (Hear, hear.)

Mr. ROSS (Ross and Co.) said it was with much pleasure that he had had that day another opportunity of meeting his co-shareholders upon their property. It was especially satisfactory to him to find that, at least among those who had associated themselves with him in the development of mines, a growing interest was being evinced to visit the respective properties with which they were connected. He did not know that he should be treading upon the toes of anyone when he took to himself the credit of having initiated this most wholesome practice; but, be that as it might, the fact was perfectly well known to those with whom he was more immediately associated that it had been his constant endeavour for years past to impress upon all the desirability of adopting this most salutary course. The investment of capital in other channels of commercial or industrial enterprise engendered the anxiety to visit, where practicable, the object or work upon which the outlay has been incurred; but, singularly enough, when capital has been ventured upon the opening out of a mine—in regard to which it is, perhaps, more than in any other case necessary to obtain every atom of information that can possibly be elicited—there appears to exist a supineness, an apathy, an apparent heedlessness, inducing more or less the same sort of feeling on the part of the executive, although otherwise anxious to bring about successful results, and at the same time opening the door for the commission of *laches*, which a little ordinary interest, to say nothing of watchfulness, on the part of shareholders might in most cases avert. (Hear.) He did not mean to say that a visit to a mine would enable the unpractised eye to form any appreciable opinion as to its merits or capabilities, but he thought those present would bear testimony to the fact that by the information which their manager had imparted during the inspection of their property they had now not only a much clearer idea than hitherto as to its actual condition and prospects, but had had demonstrable evidence that they were really the possessors of a mine which, according to the opinion of all who knew anything of the subject, required nothing but an energetic development to bring about successful results. (Hear, hear.) Since he last had the pleasure of addressing the shareholders the Van Mine, on the slope of yonder mountain, had, so to speak, emerged from a comparatively unknown existence, becoming—and deservedly so—the great pole-star of the mining horizon. When he (Mr. Ross) first came mining in that district it was not only comparatively unknown to the capitalist, but those who now extolled its merits, and affirmed there were yet many other Vans to be discovered, were among the foremost to shrug their shoulders and shake their incredulous heads, and in the "van" of these unbelievers were, of course, the members of the Stock Exchange, several of whom had, kindly enough no doubt, called him aside, and, with an earnest friendship, had said, "If you have any respect for your reputation you will not go mining within 20 miles of Llanidloes." He was speaking of some two or three years since; but what did they now find? Why, that some of the leading members of the Stock Exchange had purchased the Van Mine, which was within three miles of Llanidloes, and sold it to a company for 50,000*l.*, and its present aggregate market value was no less than 500,000*l.*; in other words, each share, which originally cost 4*l.* 5s., could now be sold for 39*l.* or 40*l.* This was but another instance of what may, and often does, result from a judicious perseverance in the development of a well-selected mineral property. He could trace in the history of their own mine—Capel Banhaglog—a repetition of the earlier career of Van, in which, in the first instance, a lode was discovered under somewhat analogous circumstances to that in Capel. It was this discovery of the Van lode, approaching the top of the hill, that induced Capt. Williams, the indefatigable manager, to commence the driving of the adit which had led to the opening up of such enormous riches, estimated by some to be worth something like 750,000*l.* In Capel a lode had been discovered, also on the slope of the hill, and their manager, following the commendable example set by the manager of Van, had commenced an adit in the valley; and who, he (Mr. Ross) would ask, could say that the extension of that important work would not lead to the opening out of a lode similar in extent and value to that which had placed Van in the enviable position it now occupied? (Hear, hear.) At any rate, no effort should be spared on his part to bring about remunerative results. (Hear.)

Mr. W. A. BROWNE, who had seen a great deal of mining in different parts of the world, endorsed the statement of the Chairman as to the efficient and economical manner in which the whole of the preliminary operations had been completed, and there was no doubt that the prospects of the mine were of a character that the least sanguine among them could not fail to be encouraged, as there could be no doubt that there were substantial grounds for believing that East Mid-Wales would prove to be one of the leading mines in the Llanidloes district.

Capt. JOHN KITTO (the manager), in reply to questions, stated that the prospects were now more than equal to anything they could reasonably expect at the present initiatory stage of development. The deep adit level had been driven between 70 and 80 fms. on the course of the lode, and for the whole length it had averaged from four to six, and in some places as much as eight, feet wide. The engine-shaft was down 3 fms. below the adit level, where the lode was 4 feet wide, exceedingly promising in character, and producing very good stones of lead ore. The shaft sinking higher up the mountain, which had been suspended on account of the water, was now being drained by the adit level, and it was expected that its sinking could be resumed in a few days; that would come down at about the present end of the adit, which would give ventilation. The general character of the lode had much improved during the last week, its character now being more nearly resembling what it was in the shaft when the ore ground was driven through at the time of the last meeting. The stuff they now saw on the bank was in every respect more kindly than anything yet seen in any mine in the district. As to the machinery, he might state that before the end of the week everything would be finished, and the 30-ft. water-wheel would be at work. The leats, roads, and the large reservoir were complete, as were all the other requirements necessary for the working of the mine for some years to come. Looking at the property as a whole, and at the favourable character of the lode so far as it had been opened out, there were the soundest reasons for the shareholders to look forward to the early realisation of successful results. (Hear, hear.)

Capt. SAMSON KITTO, the resident agent, said his opinion of the mine was best seen by the interest he held in it, which, comparing his means with the influential and wealthy shareholders he was addressing, represented a considerable stake in the company. (Hear.) He fully corroborated all the Chairman had said with regard to the prospective value of the mine, and as a substantial proof of his opinion he might mention that the small amount of capital he had accumulated during the several years he had resided abroad was invested in this and the neighbouring mines, with which he was connected, with the view of providing for himself and family when he was past work. (Hear, hear.) He did not hesitate to say that he had never seen anything more promising than the discovery that had been made in East Mid-Wales. Those practically acquainted with mining would estimate the prospective value of the discovery when he mentioned that, although only 15 feet below surface, the lode was composed of a beautiful galena, phosphates, and carbonates. The lode in the engine-shaft was also of a very promising character. He had no doubt whatever that as soon as they got the water-wheel to work they would speedily return considerable quantities of ore.——Mr. HUMBLE asked if there would be sufficient water at all seasons of the year to keep the water-wheel at work?——Capt. JOHN KITTO said that there was usually a large stream of water, and when that could not be depended upon they had the large reservoir, so that he did not think they would ever have any difficulty on account of scarcity of water.

Mr. MONCKS asked if anything like a positive opinion could be given as to the probable depth at which the lode would become productive?—Capt. KITTO felt justified in saying that at a reasonable depth it would be found productive. One favourable feature was that as the drivage was extended towards the hill the lode improved.

Capt. KULBACH drew attention to the report which had been written by Capt. Kitto, in which he stated that the lode was as good as anything he had ever seen in the district.——Capt. KITTO said he had not seen anything to induce him to alter his opinion—in fact, he might now state that the indications about the engine-shaft were far superior to anything he ever saw in the district.

A SHAREHOLDER would like to know what Capt. Kitto meant by the district?—Capt. KITTO said he meant the whole of the Llanidloes district. For instance, they had a richer lode at Brynpostig, but the character of the lode at Capel Banhaglog, considering the depth, was altogether of a better character than at Brynpostig. He would challenge the whole district to produce such stuff.

The CHAIRMAN said the Van Mine had been at work something like 12 years before it had raised even as much ore as Capel had upon the surface; and in their future operations they hoped to profit by the experience gained in the development of Van. They saw a certain amount of work was to be done, and the sooner it was done the better and the cheaper it would be, simply because that by saving time they would save money.——Mr. HUMBLE remarked that time must, of course, be given to sink the shafts and open the levels before any very considerable returns could be expected.

Upon the proposition of the CHAIRMAN, seconded by Mr. FISHER, the report of the directors and balance-sheet were received and adopted.

Votes of thanks were passed to the Chairman and managers for the satisfactory information they had afforded the shareholders, all of whom expressed themselves much pleased with their visit to the mine. The proceedings then terminated.

[The reports of the meetings of the Mid-Wales and the New Brynpostig Lead Mining Companies are unavoidably postponed till next week.]

MINING COMPANY OF IRELAND.

At the half-yearly meeting of this company (Mr. PATRICK BYRNE D'ARCEY in the chair) the directors were enabled to give a very satisfactory account of the progress made. The principal features of interest are that the working of the Knockmahon Mines, on which there was the previous half-year a loss of over 4000*l.* reported, has returned a profit; that there is a diminution in the aggregate debts of 1500*l.*, and a saving of interest; and that instead of a profit of only about 280*l.*, and no dividend, as in the previous half-year, the profits in the past half-year are about 4800*l.*, and the directors were enabled to recommend a dividend at the rate of 6 per cent. per annum. Mr. John Arthur Phillips has visited Knockmahon for the company. The present monthly raising of ores amounted to about 300 tons, which made it evident that the Knockmahon Mines were now in a less satisfactory position than they had been in some former years, but if certain operations were carried out, with such others as might suggest themselves during the progress of the works, there was every probability that the Knockmahon Mines would again become as productive and prosperous as they ever were at former periods.

The CHAIRMAN said the report was so far satisfactory, but, in justice to Capt. Crase, he must say that Mr. Phillips could not suggest anything that was not being done. Their object in bringing in Mr. Phillips was to see that they were warranted in going to the expense they did with regard to the new trials, and by his report the shareholders would see that they were. They had taken another new royalty in the neighbourhood from Mr. Palliser, and the bargain with regard to it, he was happy to say, was altogether completed. Mr. Phillips examined it for minerals, but he (the Chairman) asked him not to make any report until they had received the final conclusion of their negociation, and, if Mr. Phillips's version were true they might have had a great deal of trouble about it—not from Mr. Palliser, but other parties. With reference to the collieries of the company, they were improving. He did not think it was right to be sanguine, but their admirable manager at the collieries (Mr. Lampries) told him that their profits would increase; and if they improved to the extent he mentioned, which would be only 5000*l.* a-year, that would always give them 6 per cent. on their capital, supposing they had no other source of income. This season the returns would have been larger had it not been that it was so wet.

A resolution was proposed, but withdrawn, for reducing the number of directors to nine.

In reply to a SHAREHOLDER, it was stated that the lawsuit in connection with the Berehaven purchase would go on in November, but details as to the position of affairs, of course, cannot be published.

Messrs. Lombard and Glennan were appointed auditors, and the meeting terminated with the usual complimentary votes.

GEOLOGICAL SOCIETY OF LONDON.

June 23.—Prof. T. H. HUXLEY, LL.D., F.R.S., President, in the chair.

G. H. Wollaston, of the Geological Survey of England and Wales; Richard Pearce, Swansea; Richard Moreland, jun., Old-street, London; James N. Shoolbred, B.A., Assoc. Inst. C.E., York-buildings, Dale-street, Liverpool; Fritz Gillman, Ashley-place, Westminster, S.W.; and Richard Abbay, B.A., Fellow of Wadham College, Oxford, were elected Fellows of the Society. The following communications were read:—

1.—"On two new species of *Gyrodus*," by Sir Philip de Malpas Grey Egerton, Bart., M.P., F.R.S., V.P.G.S.

2.—"Note on a very large Saurian Humerus from the Kimmeridge Clay of the Dorset coast," by J. W. Hulke, F.R.S., F.G.S.

3.—"Note on some Fossil Remains of a Gavial-like Saurian from Kimmeridge Bay, establishing its identity with Cuvier's 'Deuxième Gavial d'Honfleur,' and with Quenstedt's *Dakosaurus*," by J. W. Hulke, F.R.S., F.G.S.

4.—"On the Geology of a Portion of Abyssinia," by W. T. Blanford, F.G.S.

5.—"On the Graphite of the Laurentian of Canada," by Prof. J. W. Dawson, LL.D., F.R.S., F.G.S.

6.—"On the Correlation, Nature, and Origin of the Drifts of North-west Lancashire and part of Cumberland," by D. Mackintosh, F.G.S.

7.—"On the Connection of the Geological Structure and Physical Features of the South-east of England with the Consumption Death-rate," by W. Whitaker, B.A., F.G.S.

8.—"On the Volcanic Phenomena of Hawaii," by the Rev. C. G. Williamson: communicated by Sir R. I. Murchison, Bart., F.R.S., V.P.G.S.

9.—"Notes on certain of the Intrusive Igneous Rocks of the Lake District," by Dr. H. A. Nicholson, F.G.S.

10.—"On the Fossil Myriopods of the Coal Formation of Nova Scotia and England," by S. H. Scudder: communicated by Sir C. Lyell, Bart., F.R.S., F.G.S.

11.—"On the Geology of the Country surrounding the Gulf of Cambay," by A. Rogers, F.G.S., Bombay Civil Service.

12.—"On a new Acrodont Saurian from the Lower Chalk," by James Wood Mason, F.G.S., of Queen's College, Oxford.

13.—"Rodentia of the Somerset Caves," by W. Ayshford Sanford, F.G.S.

THE INSTITUTION OF CIVIL ENGINEERS.

PREMIUMS—SESSION 1868-69.

The Council of the Institution of Civil Engineers have awarded the following premiums:—

1.—A TELFORD Medal, and a TELFORD Premium, in Books (to consist of a complete set of the publications of the Institution), to M. JULES GAUDARD, C.E., Lausanne, for his paper "On the Present State of Knowledge of the Strength and Resistance of Materials."

2.—A TELFORD Medal, and a TELFORD Premium, in Books, to WILLIAM SHELEORD, M. Inst. C.E., for his paper "On the Outfall of the River Humber."

3.—A WATT Medal, and a TELFORD Premium, in Books, to ZERAH COLBURN, M. Inst., C.E., for his paper "On American Locomotives and Rolling Stock." [Has previously received a TELFORD Medal.]

4.—A TELFORD Medal, and a TELFORD Premium, in Books, to THOMAS NESHAM KIRKHAM, M. Inst., C.E., for his paper, "Experiments on the Standards of Comparison employed for Testing the Illuminating Power of Coal Gas."

5.—A TELFORD Medal, and a TELFORD Premium, in Books, to J. ELLACOTT, M. Inst. C.E., for his "Description of the Low Water Basin at Birkenhead."

6.—A TELFORD Medal, and a TELFORD Premium, in Books, to Prof. DAVID THOMAS ANSTED, F.R.S., for his paper "On the Lagoons and Marshes of certain parts of the Shores of the Mediterranean."

7.—A TELFORD Premium, in Books, to WILLIAM HENRY WHEELER, M. Inst. C.E., for his "Description of the River Witham and its Estuary, and of the various Works carried out in connection therewith, for the Drainage of the Fens and the Improvement of the Navigation."

8.—A TELFORD Premium, in Books, to JAMES ROBERT MOSSE, M. Inst. C.E., for his paper "On the Mauritius Railway, Midland Line."

9.—A TELFORD Premium, in Books, to IMRIE BELL, M. Inst., C.E., for his paper "On Sinking Wells for the Foundations of the Piers of the Jumna Bridge, Delhi Railway."

10.—A TELFORD Premium, in Books, to JOHN MILROY, Assoc. Inst. C.E., for his "Description of Apparatus for Excavating the Interior of, and for Sinking, Iron Cylinders."

11.—A TELFORD Premium, in Books, to SAMUEL PARKER BIDDER, Jun., Assoc. Inst. C.E., for his paper "On Machines employed in Working and Breaking-down Coal, so as to Avoid the Use of Gunpowder."

12.—A TELFORD Premium, in Books, to CHARLES JOHN CHUBB, for his paper "On Coal-getting Machinery as a Substitute for the Use of Gunpowder."

13.—The MANBY Premium, in Books, to DAVID MARR HENDERSON, Assoc. Inst. C.E., for his paper "On Lighthouse Apparatus and Lanterns."

The Council have likewise awarded the following prizes to Students of the Institution:—

1.—A MILLER Prize to EDWARD BAZALGETTE, Stud. Inst. C.E., for his paper "On the Use of Concrete in Building Operations."

2.—A MILLER Prize to FREDERICK HARRY MORT, Stud. Inst. C.E., for his paper "An Enquiry into the Nature and Causes of some Discrepancies between Theory and Practice."

3.—A MILLER Prize to TRISTIE JAMES ELLIS, Stud. Inst. C.E., for his paper "On the Artistic Design of Bridges."

4.—A MILLER Prize to THOMAS ROBERT GAINSFORD, Stud. Inst. C.E., for his paper "On the Construction of a Railway Tunnel, or Covered Way, at Bradford, Yorkshire, among abandoned Coal and Ironstone Workings."

5.—A MILLER Prize to CHARLES HENRY GREY JENKINSON, Stud. Inst. C.E., for his paper "On Wrought Iron Girder Bridges."

6.—A MILLER Prize to GEORGE HENRY ROBERTS, Stud. Inst. C.E., for his paper "On Reservoir Embankments."

THE WELSH SLATE TRADE.—The produce of the numerous slate quarries of North Wales is estimated at the present time to be not far from 350,000 tons annually, representing in money value about 865,000*l.*, or an average

of nearly 2l. 10s. per ton.

surrounding veins, 98,000 tons; Penrhyn and surrounding veins, 109,000 tons; Llanberis veins, 75,000 tons; Nantille veins, 40,000 tons; Corris veins, 20,000 tons: making a total of 342,000 tons. The number of hands employed, including shippers, men on new works, and all about the quarries or dependent on quarrying, is estimated at 9400. Of this total the Festiniog veins employ 2900; Penrhyn, 2500; Llanberis, 2000; Nantille, 1300; and Corris, 700.

FOREIGN MINES.

DON PEDRO NORTH DEL REY GOLD MINING COMPANY.—The directors have forwarded the following circular to their shareholders:—

SIR,—It having come to the knowledge of the directors that certain interested parties have addressed letters to some of the shareholders with the view of inducing them to sell their shares, the directors feel that they are only doing their duty by placing before the proprietors the following facts:—With a view to keeping the proprietors fully informed upon all matters relating to the mines the directors instructed Mr. Symons to forward by the earliest opportunity particulars of any change, either of a favourable or unfavourable character, so that should either an increase or a decrease in the produce seem probable, the shareholder should be the first to receive the intimation. On the present occasion, owing to an increase of water, Mr. Symons reports that there is a probability of soon being unable to work the bottom and richest stopes until powerful pumping machinery has been erected. The directors would draw the attention of the shareholders to the monthly slip for August, 1868, wherein, under the head of "Drainage of the Mine," it was explained that a horse-engine had been ordered, and that if possible the drainage would be carried on by means of Californian pumps until the horse-engine was erected. Under date the 1st of June Mr. Symons reports that owing to difficulties experienced in dispatching the horse-engine had not then left Rio, but if it is not by this time at the mine it may fairly be supposed that it is on its way. It is not quite clear from the report whether the substitution of iron for wooden machinery will delay the erection of the horse-engine, but as in the original requisition Mr. Symons desired that "drawings of the machinery be forwarded from the foundry, so that the wood work be prepared," the inference naturally is that the wood work has been prepared, and that until the iron work (which is now thought advisable, so as to make the pumping machinery permanent) has been received, the horse-engine will be temporarily fitted. Should, however, the erection of the horse-engine be delayed, and should the water in the richest stopes not be kept under by the Californian pumps (for facilitating the work of which a machine has already been made), the reserves, which are richer and more extensive than in 1867, will doubtless give good general work, whilst in the event of rich bunches being encountered in them the present produce may even be maintained, whilst the newly discovered lode may also improve and assist the returns. Comparing, then, the present position of the mine with the year 1867, when the lodes were so seriously disordered, and assuming that the produce and profit from June to December, 1869, only equal those for the same period of 1867, the directors see every reason to hope that although the present highly satisfactory returns may not be maintained, even in such a case the results of the year's operations will enable dividends to be paid equal to those declared for the year 1868:—

	Oits.	Profit.
The produce and profit from Jan. to May, 1869, amounts to..	110,102	..£32,260
Ditto, June to December, 1867 (the seven months of 1867, after the lodes became disordered)	91,087 ..	24,101
Total	201,189 ..	£56,361

ORINOCO GOLD.—The directors have announced the allotment of the shares which were offered for private subscription only. Senor Nadal, late Foreign Minister for Venezuela, has joined the board. The Caratal gold district appears to be gaining in importance. The *Bulletin Commercial* of Ciudad Bolivar, of May 5 states that the American Company has sent into that city 2800 ozs. of gold, the result of 16 days' working. M. Thirion, Venezuelan Consul-General in France, states, "on reliable and trustworthy sources," that the mines in general are now giving large quantities of gold, and that the quantity of gold sent by the packet of May 11 was not much under 4000 ozs. to 5000 ozs.

[Messrs. Somes, Mullens, and Co., of Old Broad-street, as consignees of a considerable portion of the gold from the Caratal district, state that the following are the exact quantities forwarded from that settlement between October, 1868, and May, 1869:—1868: Oct., 2209 ozs.; Nov., 1461 ozs.; Dec., 2899 ozs.—1869: Jan., 1954 ozs.; Feb., 1930 ozs.; March, 2341 ozs.; April, 2060 ozs.; May, 3315 ozs.: total, 18,169 ozs. We may add that until the erection of the American Company's machinery quite recently, the crushing of the ore has been entirely performed by hand.]

IMPERIAL SILVER QUARRIES.—L. Chalmers, June 14: Last week we worked in an adamantine bar of sienitic porphyry, and made only 7 feet.

PESTARENA UNITED.—Thomas Roberts, James Mitchell, Thomas Warne, July 2: We retorted the amalgam obtained from the three districts in June month, and melted yesterday the gold; to-day we consigned it for remittance to the office—eight ingots, of the weight of 760 ozs. 15 dwts. 5 grs. This gold was obtained from 935 tons of ore; 179 tons amalgamated at Pestarena yielded 236 ozs. 17 dwts. 12 grs.; 181 tons of more inferior ore, amalgamated at Battigio establishment yielded 140 ozs. 6 dwts. 10 grs.; 62 tons from Canl Mine yielded 28 ozs. 13 dwts. 2 grs.; and 513 tons from Val Toppa Mine gave 354 ozs. 18 dwts. 5 grs.—Mines: Aquavite: The lode at the engine-shaft sinking under the 46 yields 2½ tons of ore per fathom, estimated to be worth 1¼ oz. of gold per ton; the lode in the end, driving south in the 46, 2 tons per fathom, worth 1 oz. per ton; and the stope in bottom of this level yields 7 tons, worth 2 ozs. per ton. The 33 south has just passed through a shoot of ore 10 metres long, on which we are now stoping; this new stope in the back yields 5 tons, that give 1¼ oz. per ton. The old stope, in back of this level, is now producing 2 tons of ore per fathom, that give 1 oz. per ton. About the middle of the present month we shall, however, be in a position to work the ground north of the present stopes, where the lode will yield 5 tons of 1¼ oz. ore per ton. The end of the 23 south promises for an improvement. The stope in back of this level yields 5 tons of ore per fathom, worth 1 oz. of gold per ton. The stope in bottom, south of whimshaft, yields 4 tons, worth 1¼ oz. per ton. The end of the 20 north is poor at present. The stopes in bottom of this level yield 5 tons of ore per fm., worth 1¼ oz. per ton. At the adit the winze sinking below the boundary stope yields 5 tons per fm., worth oz. per ton, and the stopes south of this winze 3 tons, worth 17 dwts. per ton.—Peschiera: The lode in the end of the 70 north has divided into two parts, yielding at present a small quantity of low-price ore. The stope in bottom of the 70 yields 6 tons of ore per fm., worth 1½ oz. of gold per ton. The stopes in bottom of the 75 yield 6 tons of 1½ oz. ore per ton. The stope in bottom of the 46, on No. 2 lode, yields 3½ tons, worth 1¼ oz. per ton. The stope in back of the 16 south yields 4 tons, worth 16 dwts. per ton. In consequence of an unusual scarcity of miners at present we have suspended driving this end south to the ends driving in Aquavite Mine. We have made slow progress in the past month in opening the old 65 fm. level. No change to notice in the cross-cuts. At surface we have made fair progress with the river wall.—Cani Mine: The road and tramway leading to the shoot have been repaired. The rise in back of Cavetta level, on the side lode, yields 4 tons per fm., worth 10 dwts. per ton. The stopes at the Piazza Morra level, on the Cadorna lode, yields 6 tons per fathom, worth 8 dwts. per ton.

Val Toppa: The lode in the end driving north on the flat lode, at Marmo Rosso level, or over Fisher's, yields 6 tons per fathom, estimated at 17 dwts. per ton. The lode in the end south, over Marmo Rosso level, yields 3 tons per fm., worth 7 dwts. per ton. The cross-cut west from the south end, on the new lode, in Fisher's level, continues to go through a bed of quartz, saving work; we anticipate the main part or the lode is yet before the cross-cut. The stopes in back of this level are not quite so rich as when last reported. The lode in a rise north of second cross-cut continues good, yielding 10 tons of ore per fathom, that we estimate at 1½ oz. per ton. This rise will, about the latter part of this year, be communicated with the end driving north at Marmo Rosso level; when this communication is effected it will further improve our position for stoping on the new or flat lode. The lode in the winze sinking under Fisher's level is 3 ft. wide, yielding ore that we estimate to be worth 10 dwts. per ton. The lode in the end driving north is 4 ft. wide, worth 16 dwts. per ton. The lode in the end driving south from No. 1 cross-cut is 2 ft. wide, estimated at 10 dwts. per ton.—No. 2 Level: The lode in the end south from No. 1 cross-cut is 2 ft. wide, worth 1 oz. of gold per ton. The tramroad to this end will be completed this week. In a trial cross-cut east from the great quartz lode, between Nos. 2 and 3 levels, we have reached a beautiful stratum of rock.

CAPE COPPER.—Namaqualand, May 22: Fine rains had fallen, and the yield was improving. The superintendent writes:—"It is again my pleasing duty to report a considerable improvement in the 20 driving east from flookan course, Job's branch. The ore is extremely rich in quality, and the course has widened considerably." The explorations at Spectakel continue favourable, and on May 17 the agent reports that they had met with stones containing native copper. The mule sickness continues, but vigorous steps are being taken to stamp it out. The engineer reports that he shall be able to obtain in the colony the necessary labour for the tramway, and he hopes to get the first 10 miles completed before the dry season sets in, and this distance will bring it to a point where the better portion of the present copper road begins, and thus materially improve the transport, and enable the mules to carry to that spot all through the summer. The ordinary reports will come, as usual, by the next mail. Bills of lading are received for 523 tons together, per Clarissa, William Jones, Celt, and Hero of the Nile. The loading of the two first-named was reported in the last summary. The Croydon would sail on June 5 from Cape Town to Hondikilp, to load 550 tons for Swansea.

RHENISH CONSOLS.—G. Sweet, Wiehl, June 30: Christiana: The engine-shaft has been deepened this month 1·1 lachter; total depth attained below the 20, 8·2 lachters. The end driving east on the north part of the lode, in the 20 lachter level, will afford 10 centners of lead ore per lachter. The driving east, on the south part of the lode, in the 10 lachter level, will also afford 10 centners of lead ore per lachter. The western drivage in this level is poor. In cross-cutting south near the western forebreast, in the adit level, the lode is thinly spotted with lead ore, but as yet no footwall. The stope in the roof of the 20 lachter level, and east of Pittar's winze, is looking much better than it was a week since, and will afford 2 tons of lead ore per lachter. A stope west of this winze will afford 1 ton of lead ore per lachter. A stope in the roof of the 20 lachter level, and near the western end, will afford 1 ton of lead ore per lachter. A stope in the roof of the 10 lachter level, and west of Sweet's winze, will afford 1¼ ton of lead ore per lachter.—Bliebach: The 10 lachter level end, driving west on the north lode, is presenting a better appearance, and the lode spotted more with lead than it has been for some time past. The western end, on the middle lode, has not been further extended during this month, but the men have been employed in breaking through the lode towards the north level, which is 6 feet wide, and will afford 1½ ton of lead ore per lachter. Our intention is in the coming month to start a sink at this point. Nos. 1 and 2 stopes, in the roof of the 10 lachter level, on the middle lode, will each afford 15 centners of lead ore per lachter. A stope in the roof of this level, on the north lode, will afford 6 centners of lead ore per lachter. The end driving east, on the south lode, in the 10 lachter level, will afford 15 centners of blende per lachter. No discovery made in the cross-cut on the copper lode. We have four tribute bargains, at an average price of 4l. 12s. per ton for clean lead ores. Estimated returns for June: Lead ores, 540 centners, 1550 ths.; blende, 50 centners, 50 ths.=1600 ths.—Total cost on mines, exclusive of block, 1840 ths.: leaving 240 ths. Block, sinking Astley's shaft, new pumps, &c., 400 ths. The consumption of coal has been much heavier this month than for several months past, in consequence of there being no water to drive Christiana wheel.

The usual annual return of all exports and imports of copper and copper ore and regulus, tin and tin ore, lead and lead ore, spelter and zinc, for the twelve months ending Dec. 31 last, moved for by Mr. ST. AUBYN, has been issued. The import of COPPER ORE amounted to 83,334 tons; of regulus, to 30,702; of unwrought copper, copper in bricks or pigs, rose copper, and cast copper of all kinds, 7361 tons; of old copper, fit only for re-manufacture (including yellow metal sheathing), 368 tons; of partly wrought copper (comprising bars, rods, or ingots, hammered or raised), 27,806 tons; of plates and sheets, 244 tons; plates for coin and copper coin, 64 tons; and of copper manufactures and engraved copper plates, 10,234l. worth. The import trade for copper has been carried on chiefly by Swansea, Liverpool, and London; Hull, Newcastle, and Goole following next in importance; small quantities being imported at Southampton, Cardiff, Dublin, and other places. The subjoined will show the relative position of the first six:—

Ports.	Ore.	Regulus.	Pigs.	Bars.	Old.
Swansea....Tons	37,628	21,785	390	5,351	32
Liverpool	21,483	8,787	447	21,934	69
London	12,698	111	4,715	246	199
Hull	5,196	—	23	35	17
Newcastle	2,841	9	1,434	158	11
Goole	2,491	—	—	—	3
Other places	997	10	352	82	37
Total	83,334	30,702	7,361	27,806	368

With regard to the source of supply, Chili, of course, occupies the highest position, yet, owing to the distance, and the consequent high cost of transport, the metal comes to us principally in the form of regulus and partly-wrought copper, comparatively little ore being received from that country. The largest supply of copper ore comes from Australia (which includes West and South Australia, Victoria, which sends the largest quantity, and New South Wales), British North America, Cuba, Chili, Norway, and Italy, the figures being:—

Countries.	Ore.	Regulus.	Pigs.	Bars.	Old.
Chili.....Tons	7,481	25,643	443	24,398	7
Australia	14,661	59	4,349	331	2
Brit. No. America	12,706	625	—	—	—
Cuba	10,374	487	—	—	—
Norway	6,871	—	36	156	24
Italy	6,031	—	—	—	5
Other places	25,210	3,888	2,533	2,921	330
Total	83,334	30,702	7,361	27,806	368

With regard to the export copper trade, considerably more than one-half of the business appears to have been carried on through London, whence was exported 16,564 tons of sheets, nails, &c., and 3011 tons of unwrought. Next follows Liverpool, with 7438 tons of the former, and 1073 tons of the latter. Then Swansea, with 1829 tons of sheets and nails, and 505 tons of unwrought. And Newcastle follows, with 75 tons of the former and 1312 tons of the latter. The ports of Hull, Harwich, and Southampton are next in rotation, and these, with sundry small exports from other places, raise the total exports of copper to 38,199 tons, which comprised of sheets, nails, &c. (including mixed or yellow metal), 27,675 tons; unwrought, in bricks, pigs, &c., 8184 tons; coin, 1174 tons; wire, 66 tons; and wrought copper of other sorts, 1100 tons. There were 2 tons of copper ore also exported. The largest proportion of these exports was sent to British India, which figures for 13,453 tons, whilst the next largest, France, took only 4387 tons. Holland took 3132 tons; Italy, 2251 tons; Hamburg, 1436 tons; and Turkey, 1408 tons. Of foreign copper we re-exported upwards of 20,000 tons—of ore, 1408 tons; of regulus, 102 tons; of unwrought, 4426 tons; of partly wrought, 16,425 tons; of plates and coin, 24 tons; and of copper manufactures, 2969l. worth. Of the partly-wrought copper, 9734 tons were sent to France and 4353 tons to Belgium; and of the unwrought, France took 1370 tons, and Russia 1085 tons. The partly-wrought copper was shipped chiefly from Liverpool, and the unwrought principally from London. There are separate lists, showing the destination of the copper exported from London and from Liverpool respectively, but it is scarcely necessary to give abstracts of them.

Of TIN, there was imported into the United Kingdom during the year under consideration 5625 tons, and of tin ore and regulus 470 tons, the chief source of supply being, of course, the Straits settlements and Holland, which together sent us 5093 tons. The exports were during the same period, of British tin 4061 tons, and of foreign tin 1105 tons. France was our best customer for both descriptions, taking 1134 tons of the former and 648 of the latter. The United States took the next largest quantity, and Russia followed. Turkey took 319 tons. The exports of tin to other places were unimportant.

The import trade in ZINC and ZINC ORE is represented by 39,967 tons of ore, 31,222 tons of zinc or spelter, and 2700 tons of oxide of zinc. Of the zinc ore, 24,491 tons came from the island of Sardinia and 13,440 tons from Spain, whilst nearly the whole of the metal came from Hamburg, Belgium, Holland, and Prussia. The oxide of zinc was received chiefly from the United States. The export trade in zinc and zinc ore is represented by 8455 tons of British zinc, sent chiefly to British India, France, and the United States; 3711 tons of foreign zinc, of which 2548 tons were sent to British India; 1647 tons of zinc ore, sent to Holland and Belgium; and 7 tons of oxide of zinc, of which 4 tons were sent to Singapore, 2 tons to New Granada, and 1 ton to other places.

With regard to the LEAD and LEAD ORE Trade, it appears that the largest quantities were imported by Newcastle, London, and Shields, the chief sources of supply being Spain and Greece. The subjoined tables show the ports into which the lead and lead ore were imported, and the countries whence they were obtained:—

Ports.	Pigs and sheets.	Ore.	Red lead.	White lead.
Newcastle.....Tons	18,224	2,184	—	—
London	14,365	1,070	34	561
Shields	10,610	—	—	—
Liverpool	2,991	392	—	142
Aberdeen	1,124	—	—	—
Other places	2,147	8,236	41	404
Total	49,461	11,882	75	1107

Countries.	Pigs and sheets.	Ore.	Red lead.	White lead.
Spain.....Tons	37,229	449	—	93
Greece	7,722	—	—	—
Italy	46	9,480	—	—
Holland	1,036	3	71	501
Other places	3,428	1,950	4	513
Total	49,461	11,882	75	1107

The export trade for British lead was chiefly carried on through London, Newcastle, Liverpool, Hull, and Llanelly. Only 41 tons of British lead ore were exported, of which 37 tons were sent from Liverpool, and the remainder from London. The exports were:—

Ports.	Pigs.	Sheet.*	Piping.	Shot.	Lithage.	Red.	White.
London..Tons	19,462	3105	525	1242	147	1722	2932
Newcastle ..	6,229	388	376	96	278	1437	370
Liverpool....	2,624	1392	1156	941	67	308	1281
Hull	2,243	556	83	12	54	195	84
Llanelly	2,670	—	—	—	—	—	—
Other places..	469	136	141	39	24	138	526
Total....	33,697	5577	2281	2330	570	3800	5193

* Including rolled lead.

Our best customer for lead appears to have been China and Hong Kong; the United States, Russia, France, and Hamburg following next in rotation. With regard to the destination of the 41 tons of lead ore, it appears that 21 tons were sent to British India, 8 tons to the United States, 6 tons to Palestine, 4 tons to Egypt, and the remaining 2 tons to British North America. The destination of the lead can be judged of from the subjoined table:—

Countries.	Pigs.	Sheet.	Piping.	Shot.	Lithage.	Red.	White.
China, &c. ..	9,967	143	19	15	—	25	11
United States	6,160	736	73	15	35	223	2108
Russia	4,236	667	79	5	100	262	172
France	3,164	76	—	6	62	111	1
Hamburg....	2,663	267	369	55	58	188	10
Other places..	7,507	3688	1741	2234	315	2991	2891
Total....	33,697	5577	2281	2330	570	3800	5193

With the exception of 4 tons of white lead sent from Glasgow to Belgium, the whole of the foreign lead and lead ore re-exported was sent from London and Liverpool, Liverpool sending 35 tons (the total re-exported) of lead ore and 240 tons of manufactured lead, and London sending the remainder. The total re-export of pig and sheet lead amounted to 499 tons, of which 220 tons were sent to the United States, 216 tons to China and Hong Kong, 45 tons to British India, and the remaining 18 tons to Japan. Of litharge, 1 ton was parts, 38 tons being the total. And of white lead, 4 tons were sent to Belgium, as already mentioned, 15 tons to British India, and the remaining 6 tons to other places, not enumerated in the return, 25 tons being the total. It will thus be seen that, on the whole, the return is by no means unsatisfactory.

SALES OF COPPER ORES.

COPPER ORES SOLD AT THE CORNWALL TICKETINGS DURING THE QUARTER ENDING JUNE, 1869.

Mines.	Tons.	Amount.
Devon Great Consols	4173	£15,195 14 6
South Caradon	1561	11,815 12 6
West Wheal Seton	1666	7,842 18 0
Clifford Amalgamated	1522	6,200 13 6
Marke Valley	1424	5,780 1 6
Wheal Seton	1278	4,044 12 0
Wheal Basset	584	3,038 0 6
South Wheal Crofty	833	2,890 13 6
Carn Brea	628	2,565 16 0
East Caradon	629	2,416 1 6
Phœnix	623	2,290 11 6
Crenver and Abraham	836	2,106 0 0
Prince of Wales	299	2,056 10 6
Great North Downs	442	1,916 7 0
Okel Tor	515	1,591 14 0
West Damsel	333	1,366 9 6
Kelly Bray	300	1,322 17 6
North Downs	232	1,299 5 6
East Carn Brea	321	1,180 15 0
Gawton Copper	297	1,127 9 6
East Grenville	254	1,124 18 6
Craddock Moor	250	1,093 15 0
East Pool	390	1,080 13 6
Glasgow Caradon	310	1,039 16 6
Gonamena	273	992 17 6
Poldice	260	988 11 6
Wheal Emily Henrietta	195	945 13 6
Crelake	240	931 11 6
Prosper United	266	917 17 6
Par Consols	280	835 17 6
Wheal Maria and Fortescue	221	816 17 0
North Treskerby	171	784 10 6
Bampfylde	62	731 12 0
East Rosewarne	162	672 7 6
West Basset	200	645 13 0
West Caradon	142	493 1 6
Gunnislake (Clitters)	88	470 0 0
East Basset	80	467 5 0
Wheal Friendship	118	458 17 6
Crinnis Consols	80	433 17 0
Bedford United	130	374 12 6
North Roskear	62	345 13 0
Dolcoath	84	344 10 6
North Crofty	58	305 13 6
West's Ore	70	286 0 0
South Frances	58	283 9 0
Wheal Crebor	63	265 1 0
Levant	35	225 18 0
Copper Hill	82	223 13 0
Hingston Down	83	217 17 6
Belstone	32	217 6 0
Brookwood	90	207 10 0
Pennance	90	179 18 6
Carn Camborne	85	176 2 6
New Treleigh	50	160 11 0
Tincroft	43	158 12 0
Wheal Rose	32	149 12 0
Feock Regulus	20	147 10 0
Champion's Ore	34	138 9 0
Sortridge Consols	26	135 17 0
Falmouth and Sperries	40	127 0 0
Wheal Buller	24	106 4 0
Wheal Russell	50	96 5 0
Wheal Mary Florence	22	91 17 0
South Condurrow	14	80 17 0
Great South Tolgus	20	70 10 0
Rosewarne Consols	10	70 10 0
Wheal Busy	32	70 6 0
North Basset	15	50 5 0
Maudlin	10	38 5 0
Bedford Consols	9	30 3 0
Wheal Grenville	5	25 0 0
Pendarves United	6	14 11 0
Collacombe	7	12 12 0
Old Pembroke	1	1 10 0
Total	24,030	£99,573 13 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Vivian and Sons	3606	£16,246 16 2
Freeman and Co.	1517	7,258 6 9
P. Grenfell and Sons	2666	13,749 17 3
Sims, Willyams, and Co.	2501	12,381 18 9
Williams, Foster, and Co.	3946	16,442 4 11
Mason and Elkington	2365	7,586 15 4
Bankart and Sons	1668	4,213 18 0
Copper Miners' Company	2652	10,170 7 3
Charles Lambert	1146	4,962 5 9
Sweetland, Tuttle, and Co.	1963	6,561 2 10
Total	24,030	£99,573 13 0

PRICES OF MATERIALS,

As charged at the PROVIDENCE MINES during the following months:—

Description.	February.	March.	April.
Common Iron .....per cwt.	8s. 0d.	8s. 0d.	—
6 in. patent nails ..... „	19 0	—	—
5 in. ditto ..... „	19 0	—	—
4½ in. ditto ..... „	19 6	—	—
4 in. ditto ..... „	19 6	—	—
3½ in. ditto .....per 1000	20 3	—	—
3 in. ditto ..... „	4 8	—	—
Iron shovels .....per cwt.	28 0	—	—
Steel point ditto ..... „	48 0	48 0	40s. 0d
White lead ..... „	24 0	—	24 0
Leather .....per lb.	1 6	—	—
Norway timber .....per foot	8d-9d	8d-9d	—
Baltic ditto ..... „	1 2	—	—
M. C. coals (contract) .....per ton	11 3	12 6	11 3
Best candles* .....per doz.	5 9	5 6	5 6
Tallow* .....per cwt.	50 0	—	50 0
Engine oil .....per gal.	—	—	2 9
Powder .....per 100 lbs.	—	33 0	33 0
Safety fuse* .....per coil	0 4	0 4	0 4
Hemp* .....per lb.	0 5½	—	—
White yarn* ..... „	—	—	0 5½

* Delivered free of carriage.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

BEDFORD UNITED.—This celebrated mine paid dividends for nearly 20 years from the south part of the sett, which is still returning a good quantity of ore. In the more northern part of the sett there is a new shaft sunk nearly 100 fathoms deep, and cut through some fine courses of ore. This part of the sett adjoins Devon Consols, which has paid upwards of one million sterling in dividends. There is little doubt but Bedford Mines will be shortly in the Dividend List. The next sale will be sufficient to pay the working cost of the mine.

NEW GREAT CONSOLS.—The public will be shortly invited to subscribe for a portion of the new shares about to be issued to complete the development of this extensive property. The last sale of coppery mundic realised some 800l., and the returns of ore are over 500 tons per month, while the prospects of the undertaking are exceedingly encouraging.

WHEAL CLIFFORD.—It appears that the call made at the last meeting cannot be enforced, as since the passing of the new Stannary Act no call can be legally collected *unless notice of such call shall have been given in the circular convening the meeting*. Another meeting will, therefore, be necessary, and everything connected with the call will have to be gone over again. Several other shares have been relinquished since the last meeting, some of them by parties from whom a relinquishment was never anticipated. Sir William Williams, however, still retains his very large interest, desirous of doing his best to uphold this highly important sett, the importance of which to the parish of Gwennap, and, indeed, to the district generally, cannot be overrated. Sir William has now, we are informed, 1375 shares registered in his name—a clear majority of the mine, and his call last week was between 9000l. and 10,000l. In the merchants' bills, recently charged, there is nearly 1000l. charged for extraordinary expenditure, several new boilers, &c. In fact, as now managed, it is stated, the machinery is amply sufficient to keep the mine in fork in winter as well as summer. We trust such will be found the case.—*West Briton.*

THE GREAT DIAMOND FROM THE CAPE.—The "Star of South Africa" is the most beautiful gem we ever saw. It has not, of course, glittering facets, like a cut diamond, but it is as perfectly white and pure as the clearest crystal, and has besides a rich silken exterior that marks it a genuine aristocrat amongst precious stones. The greatest dullard could never mistake "the Star" for a common crystal. It is about the size of a small walnut, and in shape somewhat resembles a heart, being broad at one end and tapering slightly at the other. It is very difficult to detect the diamond shape in the irregular form of the stone, but it, nevertheless, looks living and beautiful, as if it were meant one day to glisten in a diadem.—*Cape Argus*, June 4.

WATSON BROTHERS' MINING CIRCULAR

WATSON BROTHERS,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON BROTHERS return their most sincere thanks for the great patronage bestowed and confidence reposed in their firm for 25 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the *Mining Journal*, their special reports and remarks upon mines and mining, and state of the share market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

SATURDAY.—Good demand for East Lovell and West Chiverton shares, at an advance. Taquaril, Don Pedro, and Prince of Wales weaker. East Lovell, 13 to 15; West Chiverton, 46½ to 48½; Taquaril, 2s. 6d. to 3s. 6d. prem.; Don Pedro, 4¼ to 4¾; Prince of Wales, 21s. to 23s.; Van Consols, 2½ to 3¼; New Lovell, 32s. to 35s.; Great Laxey, 18¼ to 19½; Frontino, 22s. 6d. to 25s.; Chiverton, 3½ to 3¾; Great Vor, 13½ to 14½.

MONDAY.—Market very quiet. East Lovell, New Lovell, and West Chiverton in demand. East Lovell, 14 to 15; West Chiverton, 47 to 48; New Lovell, 34s. to 36s.; Frontino, 23s. to 25s.; East Grenville, 4 to 4¼; Grenville, 46s. to 48s.; Buller, 13 to 15; West Frances, 49 to 51; Tincroft, 15 to 16; Prince of Wales, 23s. to 25s.; Great Laxey, 19 to 20; East Caradon, 7¼ to 7½; Chontales, 25s. to 27s. 6d.; Don Pedro, 3¾ to 4; Chiverton Moor, 3¼ to 3½; Great Vor, 14 to 15; Van, 36½ to 37½; Van Consols, 2½ to 3.

TUESDAY.—The market continues very inactive. East Caradon receded to 7l., sellers. Prince of Wales, 23s. to 25s.; Grenville, 47s. to 49s.; Frontino, 24s. to 25s.; Great Vor, 13½ to 14½; New Lovell, 34s. to 36s.; East Lovell, 14 to 15; Buller, 12 to 14; West Chiverton, 47 to 48; West Frances, 49 to 51; Chontales, 25s. to 30s.; Don Pedro, 3⅝ to 3⅞; East Caradon, 6¾ to 7.

WEDNESDAY.—Market again quiet. Don Pedros advanced to 4l. buyers. Buller, Chiverton Moor, and East Lovell flatter. Don Pedro, 4 to 4⅛; Buller, 12 to 14; Chiverton Moor, 2¾ to 3; East Lovell, 13½ to 14½; West Chiverton, 47 to 48; West Frances, 50 to 52; Drake Walls, 16s. to 18s.; Great Vor, 13½ to 14½; Frontino, 24s. to 25s.; Tincroft, 15 to 16; Prince of Wales, 22s. to 24s.; Grenville, 47s. to 49s.; Van, 36½ to 37½; Van Consols, 2½ to 3.

THURSDAY.—Market quiet, and prices nominal. West Chiverton, 47 to 49; Prince of Wales, 21s. to 23s.; West Frances, 50 to 52; Don Pedro, 4⅛ to 4⅜; Frontino, 23s. to 25s.; Chiverton, 3¼ to 3½; Chontales, 25s. to 27s. 6d.; New Lovell, 34s. to 36s.; East Lovell, 14 to 14½; Grenville, 47s. to 49s.; Great Wheal Vor, 13½ to 14½; Van, 36 to 37; Van Consols, 2½ to 3.

FRIDAY.—Market continues very inactive, and prices merely nominal. East Lovell, 14 to 14½; Great Vor, 13½ to 14½; Uny, 3½ to 3¾; East Caradon, 6½ to 7; New Lovell, 34s. to 36s.; West Chiverton, 47½ to 48¾; Chiverton Moor, 2½ to 3; Grenville, 47s. to 49s.; Rosewall Hill, 25s. to 30s.; Prince of Wales, 21s. 6d. to 22s. 6d.; Don Pedro, 4⅛ to 4⅜; Frontino, 24s. to 25s.; and Van Consols, 2½ to 3.

ALARM APPARATUS FOR STEAM-BOILERS.—Mr. T. F. TAYLOR, of Philadelphia, U.S., has invented an automatic apparatus for indicating a deficiency of water in steam-boilers. The apparatus is provided with a whistle or other similar instrument, which is attached to a tube. The lower end of the said tube is open, and a little below the desired water line; when the water sinks below this line steam enters the tube, and by its heat expands the same. The upper end of the tube is closed, and provided with a socket, which carries the whistle. The socket communicates with the steam space of the boiler, and is provided with a valve. The tube carries a lever, which is arranged to open the valve and sound the whistle when the tube is elongated. The lever is held by a rod, which is attached to the lower end of the tube, and whose length is not affected by the admission of steam to the said tube. The tube is, preferably, constructed of brass. Upon the upper or closed end of the tube he fits the socket which carries the whistle. The said socket is provided with a branch or nozzle, whose outer end communicates with the steam space of the boiler; in this branch or nozzle he arranges the valve, which when closed prevents the passage of the steam to the whistle, but which when opened allows the steam to pass through the socket to the said whistle, and cause the same to sound. This valve is kept closed by a spring. The valve spindle or stem projects through the branch or nozzle, and lies under the end of the lever, which is pivotted between or upon jaws or ears projecting from the socket. The rod which holds this lever is preferably made of iron; the said rod extends from the lower end of the tube to the lever, and is provided with a head, which has a slot or aperture for the lever to pass through, the top of the said aperture resting upon the top of the lever a short distance from the pivot, and between the same and the valve spindle. The lower end of the rod passes through a foot projecting from the tube, and is provided with nuts on each side of the said projecting foot, whereby it may be adjusted accurately to give it the required length between the foot and top of the lever. When the water in the boiler sinks below its proper level, and the steam enters the lower or open end of the tube, the heat of the steam expands or elongates the tube, and carries the pivot of the lever upward, increasing the distance between the said pivot and the lower end of the tube. The iron rod which is fixed to the said lower end, and whose length is not changed by the admission of steam into the tube, holds the lever, and causes the free end of the same to press upon the valve spindle, thereby opening the valve and sounding the whistle.

MOTIVE-POWER ENGINE.—In his specification, Mr. G. J. WORSSAM, of Wenlock-road, City-road, says—In carrying out my invention I avail myself of the property of bodies or objects of a certain specific gravity when immersed in a fluid of a greater specific gravity to rise or ascend to the surface of such fluid; this buoyancy represents a greater or a lesser force or power, according to the greater of lesser difference between the specific gravity of the object and that of the fluid, and the size or the displacement caused in the fluid by such object. In order to make the said objects, which I will call floats, as light as possible, and yet strong enough to resist the pressure of water, I construct them of thin sheet metal, and in preference in the form of tubes or hollow cylinders with conical or flat ends; a number or series of these cylinders are hinged or linked together in a similar manner as the buckets of a chain-pump; this chain or float is passed over two sets of pulleys, discs, or arms fixed to two horizontal shafts, the one placed vertically above the other, the said pulleys being formed to suit the shape of the floats; one-half of this chain of floats passes through the centre of the tank holding the water or other fluid, and the other half passes outside the tank through the air. The floats when in motion enter through the bottom of the tank in the manner hereafter described, and rise up by their buoyancy through the water; they then pass round the top pulley, descend outside the tank, and passing over the bottom pulley, again enter into the tank, and so on. Now, the principal part of my invention consists in passing the float through the bottom of the tank. On the bottom of the tank I fix a barrel or cylinder; this cylinder may be square or any suitable shape to fit one or more of the floats, and conical at one or both ends to admit of the free ingress and egress of the floats, and on every float I fix an ordinary cup leather, either made of leather, india-rubber, wood, metal, or any other suitable material. Supposing the floats to be in motion, the one float passing into the cylinder before the other has passed out would prevent very little if any escape of water, which escape could be pumped by a small pump into the tank again. The motion communicated by the rising floats to the float pulleys, discs, or arms and shaft is further transmitted by means of belts or gearing in the manner usual with other motive engines. The details of arrangement and construction of my new motive-power engine may be altered or varied, but the main feature of my invention consists in passing the floats through the bottom of the tank. I do not confine myself to fixing the cup leathers, made either of leather, india-rubber, wood, metal, or any other suitable material, on the floats themselves, as I may in some cases fix the leathers, india-rubber, wood, metal, or any other suitable material in the barrel or cylinder at the bottom of tank, so as to form a water-tight joint round the floats passing through the cylinder or barrel.

Mining Correspondence.

BRITISH MINES.

BLUE HILLS.—S. Bennets, A. Gripe, July 3: The masons have completed building the engine-house, within contract time, and are now engaged building the stack, which will be raised to a sufficient height for the brickwork thereon without loss of time. After this they will commence the boiler-house, the foundation being already in order. The roofing of the engine-house is being prepared and fixed, and the slating will go on at once. We have begun to put in the engine, which will be pushed forward as soon as possible. The engine-shaft is ready for the pitwork, and the shaftmen have been engaged in erecting the capstan. The shears will now be fixed, when we shall be ready to send down the rods, pumps, stays, &c.—Poulyear Shaft: The clearing of the 13 fm. level east is going forward, but at the present point we are just under a low back, where the old workers left their attle in the level, and which must be removed to the shaft, to enable us to get into the end. The adit level east, on Claridge's lode, is progressing very well towards the point for meeting the proposed new shaft, and the leading part of the lode has shown a little more mundic than heretofore, but it has not increased in size: an improving channel of ground is just making its appearance. The general surface work is going on favourably.

BRONFLOYD.—Thos. Kemp, July 7: Settings for July: No. 3 Shaft, North Lode: This shaft is in regular course of sinking below the 73, under contract to sink it to the 84, cut plat, &c., for 250*l.*; the part of the lode carried therein is composed of blue slate, intermixed with hard spar, and at times is producing good stones of lead ore. Four men to open and stope the lode to the west of cross-cut in the 73, at 70s. per fathom; lode worth 35 cwts. of ore per cubic fathom. Six men to stope the lode to the east of cross-cut, back towards the winze, at 60s. per fathom; lode worth 35 cwts. of ore per cubic fathom. Six men to strip down the south part of the lode to the west of cross-cut in the 62 (as per bargain, 14*l.*); lode worth 1¼ ton of ore per cubic fathom. Six men to stope the lode under the 52; lode worth about 2 tons of ore per cubic fathom. Four men to stope the lode over the back of the 52 to the west of winze; lode producing 1 ton of ore per cubic fathom. Two men to drive the 40 fm. level end west, at 60s. per fathom; the lode here still continues soft, and is unproductive for lead ore. Our surface operations are progressing well.

CALDBECK FELLS.—P. Hawke, R. Trevarthen, Thos. Lamb, July 7: The stratum in Lainton's engine-shaft, sinking below the deep adit, consists chiefly of porphyry, and indicates that the productive ground and shoots of lead passed through in the shallow levels will be found to continue in depth, and prove of immense value; every effort, therefore, is now being made to reach the important depth of 20 fms. below the deep adit. We shall then drive with all vigour both north and south at the 20, from the engine-shaft. The cross-cut south, first and foremost, is to intersect the north lode; secondly, the great south lode. The cross-cut north is to intersect first the great copper lode that passed through the shaft in the adit level; secondly, the Silver Gill lode. We would here note that, in all probability, the north lode will be reached in four weeks after the completion of the shaft to the 20 fm. level, and the great copper lode in four months from that period. We expect to reach the great south lode in five months, and the Silver Gill lode within twelve months from this date. We would add that at the expiration of that period (twelve months) the mine will be completely opened, and if developed it will, we feel confident, be equal to any of the mines successfully wrought in Great Britain. It cannot be disputed that these lodes present to the practised eye all the characteristics of vast richness in depth—in fact, we are confident of its becoming a rich and lasting mine. We are at present engaged fixing timber and securing the sump-winze west on the junction of the north and caunter lodes, below the deep adit; also stripping down the west end of the same, in order to recover the lost winze, to enable us to resume and prosecute the sinking with greater economy and dispatch then hitherto. We have yet 4 fms. to sink to complete the winze the required depth—that is, 13 fms. below the adit, when we shall at once proceed to drive both east and west on the course of the north and caunter lodes, likewise put out a cross-cut south, and intersect the south lode in this level. In this we have every confidence of success. The 90 east, on the north lode, is worth for copper 20*l.* per fm. The stope in the back of this level, on the said lode, is worth for copper and blue lead 15*l.* per fathom. The new rise in the back of the 90 west, in close proximity with the end on the north lode, is worth for blue lead and blende 10*l.* per fathom. The stope east of the old rise, in the back of this level, on the north lode, is worth for lead and copper 60*l.* per fathom. We are much pleased to report so favourably on this new end—the 80 west—on the north lode, in consequence of its increased value subsequent to our last report, dated the 18th ult. This end is now worth for copper, lead, and blende 75*l.* per fathom. The stope in the bottom of the 80, on the north lode, is worth for blue lead and copper 35*l.* per fathom. We observe the tribute department throughout the mine to be fully equal in value to our preceding report. We have great pleasure in stating that we sampled on Monday last No. 1 parcel of blue lead (computed) 14 tons; No. 2 parcel of coloured ore, 41 tons; No. 1 parcel of copper, 5 tons; No. 2 parcel of copper, 10½ tons: total, 70 tons 10 cwts., thus showing an increase of about 18 tons over the previous sale. We are pleased to intimate that we are making satisfactory progress in the extension of dressing-floors, which we assure you is greatly needed, by the fact that the evidence of a greater yield of mineral from the mine is too conclusive to admit of doubt. Were the dressing-floors and dressing apparatus completed, we would increase at once your monthly sales of lead and copper from 70 to 100 tons and upwards.

CAPE CORNWALL.—R. Pryor, John Davy, July 6: Saturday last being our pay and setting, the following bargains were set:—The 100 fm. level cross-cut to drive north of the engine-shaft, by four men, at 14*l.* per fathom; the ground in the end is thickly impregnated with mundic and spots of copper ore. The 70 fm. level cross-cut to drive south of this shaft, by four men and two boys, at 14*l.* per fathom; the ground here is showing great indications of being near the lode, and is congenial for the production of mineral.

CARADON CONSOLS.—S. Bennetts, July 6: The cross-cut is commenced at the 90 north, skip-road fixed, and the pitwork being fixed this day at that level. There has been no lode taken down in either of the ends during the week. In the north cross-cut at the 78 we have just cut the wall of the lode perpendicular, gossany, and discharging (for this mine) a large quantity of water, more so than all the other lodes in the mine together. This looks as if it is a large open lode, and is nearly in the supposed position of the perpendicular lode which produced some good ore in the old 40 fm. level.

CHIVERTON—Jas. Juleff, John Borlase, July 8: In the 30 fathom level end, south of new shaft, the lode is 2 ft. wide, composed of soft spar and good stones of lead, with a very promising appearance. In the 30 fm. level end, north of the new shaft, the lode is 4 ft. wide, producing good saving lead work. In the 30 west, on the east and west lode, the lode is 6 inches wide, composed of spar and mundic. We have a pare of men taking out foundation for engine-house.

CHIVERTON MOOR.—G. E. Tremayne, W. Bennett, July 3: Setting Report: The engine-shaft men have cut ground for bearers and cistern, and fixed and made complete a 16-in. drawing-lift to the 85. The engine-shaft sinking below this level is down 9 fathoms, and the ground continues favourable for sinking. We purpose to sink this lift 11 fathoms below the 85, which we hope will be completed by the end of the present month. The 85 west, by six men, for the month, at 3*l.* 10s. per fathom; lode 4 feet wide, composed of quartz, mundic, flookan, and lead, and worth for the latter 7 cwts. per fathom. This lode is letting out a large stream of water, which we look at as a most favourable indication, and shows, we think, that we have reached the shoot of lead ground seen in the levels above. The 85 east, by six men, for the month, at 3*l.*; lode 2 feet wide, composed of friable quartz, mundic, and lead, with very great promises for an improvement shortly. The 75 fathom level west, by four men, at 4*l.*; the lode is at present 3 feet wide, composed principally of quartz, mundic, and lead, and worth for the latter 5 cwts. per fathom. We have three stopes in the back of this level, which are worth 15 cwts., 7 cwts., and 5 cwts. of lead, respectively. The 65 by four men, at 3*l.* 10s.; lode 2 ft. wide, at present poor. Clogg's shaft, sinking below the 40, is down 2½ fms.; sinking by six men, at 8*l.* per fathom. The cross-cut to drive north in the 40 by four men, at 2*l.* 15s. The 40 to drive west of Clogg's shaft by four men, at 2*l.* 15s. per fathom; lode 2 ft. wide, composed of quartz and flookan, with a little lead, and a very promising appearance. We are getting on as fast as possible with the erection of the crusher, and in about 10 days or a fortnight we hope to have it in working order.

CWM DARREN.—R. Williams, July 6: In the adit we have a horizontal floor of carbonate of lime, with beautiful spots of lead and copper, which circumstance induces me to believe we are close to the lode, and that when intersected it will be found good. The lead east of the shaft and cross-course continues, and, I think, shows the desirability of our seeing the lode under this point in the 20. However, we will continue here longer yet, to have further proof.

— R. Williams, July 7: On examining the cross-cut adit end this morning, I find a strong increase of water forcing its way through the forebreast, and the ground has assumed exactly the appearance of the rock in close proximity to the Darren lode. From these circumstances I infer we are close upon the lode, and from the nature of the ground I have strong hopes of finding it good. There is no change in any other part of the mine.

DOLWEN.—J. Davis, July 8: The adit level is without change. About 3 fms. more driving should intersect the north or Tygwyn lode.

EAST BOTTLE HILL.—H. Hill, July 8: We are getting on very satisfactorily with the clearing and timbering up the midway at William's shaft, now down 9 fathoms from surface, and we anticipate that we have about 4 or 5 fathoms more to clear up to get to the bottom of the old men's workings.—Western Shaft: The lode in the 10, driving east, is from 2 to 3 ft. wide—a strong masterly lode, producing a little tin, and has every appearance of producing a great quantity of tin in driving east, as we increase considerably in depth driving to hill. The deep adit end west is disordered by the influence of a slide, but I hope in a fathom or so more driving to report more favourably of its taking its regular course; the air is dead in this end, therefore, only two men can be kept to work there, and it will be so until be get communication from the midway shaft for ventilation. Our stamps are going under repair, as the old stamp heads and lifts are worn out, and we are ob'iged to replace them with new. The smiths' shop is completed and the smith preparing ironwork for the repair of the stamps. I have been underground to-day, and have broken some good tinstuff both in the adit level from the lode, and in the 10 fm. level in western shaft, and as soon as we get communication to the level we shall commence stoping with all possible speed, to get the tin prepared for market.

EAST CHIVERTON.—R. Southey, J. Grose, July 3: The 40 fm. level is extended west from Bartlett's flat-rod shaft, on No. 1 lode, about 18 fms.; this lode continues its regular course, composed chiefly of flookan and some mundic, and letting out much water, which is highly mineralised; this end is fast approaching the shoot of silver-lead ore gone down in the bottom of the 25 fathom level, and driving by six men, at 5*l.* per fathom. The 25 fm. level main cross-cut is extended north 96 fms.; this level is passing through beautiful strata of decomposed elvan and light-blue killas, which are quite congenial for the production of silver-lead ore; and should the Chiverton caunter be intersected whilst traversing this channel of ground it cannot fail to produce much mineral; now driving by four men, at 3*l.* per fathom. The 25 is opened east from the main cross-cut 13 fms. on No. 1 lode, which is of a very kindly character, producing mundic, much more quartz than usual, and driving by two men, at 3*l.* per fathom. Our engine and pitwork continue in first-class working order, and our costs are kept as low as is compatible consistant with the full development of the sett, and we consider our prospects of good discoveries were never equal to the present time.

EAST GUNNISLAKE AND SOUTH BEDFORD.—J. Bray, July 8: The Impham shaft is down 6 ft. below the 14 fm. level; the lode is 4 ft. wide, composed of spar, peach, and capel, with good stones of yellow ore. The lode in the 14 fm. level, east of Impham shaft, is 3½ ft. wide, composed of spar, peach, and prian, with stones of ore occasionally, and letting out water very freely.

EAST NEW WHEAL LOVELL.—C. Bawden, July 7: The men have not been able to costean the north ground; in consequence of the shelf being so deep, we are overpowered with water. This work has been done with a view to discover the East Lovell lode, which in that mine is worth 300*l.* per fathom. As soon as the engine is at work it will be advisable to sink a shaft in this ground. The masons are getting on well with the building of the engine-house.

EAST PROVIDENCE.—John Nancarrow, Wm. White, July 3: The following work was set to-day:—Boorman's shaft to sink below the 122, by nine men, at 22*l.* per fathom. The 122 to drive north, by six men, at 6*l.* per fathom; lode 3 ft. wide, of a promising appearance, and yielding a little tin. The 82 to drive east, by four men, at 8*l.* per fathom; lode disordered by a crossing. The 70 to drive east, by six men, at 7*l.* per fathom; lode worth 10*l.* per fathom. The back of the 70 east to stope by two men, at 3*l.* 10s. per fathom; lode worth 10*l.* per fm. The 60 to drive east, by four men, at 6*l.* per fathom; lode small. The pitches look just as usual.

EAST ROSEWARNE.—C. Glasson, July 8: In King's shaft, sinking below the 115 fm. level, the lode is 10 in. wide, producing stones of copper ore, but not enough to value. In the 115 fm. level, west of shaft, the lode is not looking so well as it did last week; now 15 in. wide, worth 10*l.* per fathom. One stope in the back of this level worth 8*l.* per fathom. One stope in the bottom worth 6*l.* per fathom. Two stopes in the back of this level, east of shaft, are worth 6*l.* per fathom each. In the 105 fm. level, west of shaft, the lode is 15 in. wide, worth 5*l.* per fathom. Two stopes in the back of this level are worth 8*l.* per fathom east. One stope in the back of this level, east of shaft, and one in the bottom, are worth 6*l.* per fathom each.

EAST WHEAL BASSET.—W. Nancarrow, July 7: In the 140 fm. level cross-cut, south of new shaft, we have just cut a lode about 15 in. wide, of a kindly appearance, but at present of no value; we shall now begin to open east and west on it, when we hope it will soon improve. In the 130, east of new shaft, we are again driving south, as we think the south lode is yet to cut. In the 130, west of No. 2 cross-cut, the lode is 1½ ft. wide, producing saving work for tin. The lode in the 125, west of cross-cut, is 1½ ft. wide, producing stones of copper ore. The stope in the bottom of the 120, west of new shaft, is worth 8*l.* per fathom for copper ore. Nothing new in the 130 fm. level cross-cut north towards the tin lode.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 7: The lode in the 120 east has improved, it is 18 in. wide, and worth very nearly 1 ton of copper ore per fathom; from the appearance of this lode in the level above we have every reason to expect an orey lode. There is no change in the 65 east; we shall dial this again to-morrow, to see if we are on the right part. The lode in the 55 east is 18 in. wide, containing a little copper ore. The lode in the 45 east is worth 2½ tons of copper ore per fathom—a most promising lode. No lode has been taken down in the rise above this level; we have desued the lode 5 feet, which will be taken down to-morrow, and, so far as we can see, it will produce fully 2 tons of good ore per fathom, which will make a produce of from 12 to 14. No other change since last report.

EAST WHEAL LOVELL.—R. Quentrall, July 7: The mine is quite as rich as last reported, with every prospect of continuing. We are now making very large profits.

— W. Hancock, July 8: South Lode: The sump-winze, sinking below the 60, is worth 50*l.* per fathom.—North Lode: In the shaft sinking below the 70 the lode is 6 ft. wide, and worth, for the length of the shaft (12 feet), 320*l.* per fm., with a good wall on the north side; sinking by twelve men, at 20*l.* per fathom. Having inspected this mine on several occasions, I find it is one of the best and richest courses of tin I ever saw here, and there are chances in favour of its continuance; if so, immense profits must be realised from this part alone, as the working cost is very small. About 200 fms. west of engine-shaft they have recently cleared out some old workings, and made a good discovery only a few fathoms below surface; the lode is worth from 10*l.* to 15*l.* per fathom, and the ground easy for exploring; this is likely to prove, on being further developed, a great adjunct to this mine.

EBURY.—F. Kitto, July 8: There is not much change in the mine since I wrote you last. The ground in the cross-cross-cut is a little harder than it was near the lode, but it is still the lead-bearing rock, and no doubt when we get a little nearer the other lode it will be softer again. There is a lode known as the Pant-y-Race lode, which is about 20 fathoms south of our shaft at the surface; there has not been much done near us on this lode, but there has been a great quantity of lead raised from this lode a little further east, and there is a party working and raising lead on the same lode now about 100 fathoms east of us. It is thought by the oldest miners in the neighbourhood to be the best speculation on this mountain to cross-cut to the Pant-y-Race lode, the distance not being very great.

FEDW.—July 6: The engine-shaft is in good course of sinking by six men; ground favourable, water so far very light. A material or store house has been built, and the smiths' and carpenters shops nearly completed. The engine-house is also being put up as fast as possible.

FRANK MILLS.—J. Cornish, F. Cornish, N. Addems, July 7: The ground in the 145 cross-cut, west from the north end, is favourable for progress, and intersected occasionally by small branches of white iron. The 145 cross-cut, west from the south end, has passed through a part of lode, consisting of quartz and mundic, thickly spotted with ore. The east lode, in the 130 south, is producing a small quantity of saving work, and looks very promising to soon improve. The west lode in the 100 south is producing saving work, and also looking well for improvement. We are now putting out a cross-cut west, a few fathoms from the 72 north end, from Taylor's cross-cut, to prove if any more is standing in that direction; the ground is favourable. The west lode in the 84 north is yielding fully ½ ton of lead ore per fathom, and the winze in the bottom of this level is also yielding about ½ ton per fathom. The following are the stopes we have at present in operation, and their respective estimated value:—One in the back of the 145 north, on east lode, yielding ¼ ton of lead ore per fathom. One stope in the back of the 84 is yielding 1 ton per fathom, two stopes in the back of the 72 are each yielding ½ ton per fathom, and three stopes in the back of the 60 are yielding 1 ton, ½ ton, and ¼ ton per fathom. All other parts of the mine are without any change to notice. We sampled on Saturday last 155 tons of silver-lead ore, being the same quantity as the preceding quarter.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., July 3: At the 82 fm. level, east from King's shaft, we have extended a cross-cut north 9 feet from the former driving, and intersected the north part of the lode, where it is worth 5*l.* per fathom under the winze sinking below the 70. The lode in the 82 west is 5 ft. wide, showing a very kindly appearance, being composed of spar and mundic, intermixed with ore, worth 10*l.* per fathom. The lode in the stope below the 70, is worth 20*l.* per fathom. The lode in Ferrell's winze, sinking below the 70, is worth 6*l.* per fathom. Nicholl's winze, below the 60, is down the required depth. The 70 fm. level end is not sufficiently in advance to make the communication, having about 3 ft. further to drive. To-day will be our monthly setting, particulars of which will be forwarded early in the coming week.

GLASGOW CARADON CONSOLS.—W. Taylor, July 6: Caunter Lode: The lode in the 78 west has not improved since my last report, it is still disordered by small cross branches, wet and troublesome, making it slow for progress. Stopes in back of this level about the same as last reported. In the cross-cut south at this level we have a good change of ground—white granite and elvan, just the same channel of ground we have about Harvey's lode, in the 65; I expect we shall soon be into this lode here.—Arrol's Lode: The 65, east of western cross-course, worth 6*l.* per fathom. Stopes in back of this level worth 7*l.* per fathom; we have holed the rise from this level to the 52, making good ventilation and opening up a piece of good tribute ground.—Harvey's Lode: In the 65 east the lode is smaller, with stones of ore, but not to value. The 65 west is worth 7*l.* per fathom, in easy ground. Stopes on this lode without any alteration to notice. We are pushing on the dressing for the sampling as fast as possible.

GREAT NORTH DOWNS.—Wm. Rich, Wm. Ennor, July 7: The ground at Sleggan's engine-shaft is very wet and difficult for sinking. The 84 end west is worth 7*l.* per fathom. A stope in the back of this level is worth 8*l.* per fm. The 84 end east carries stones of ore. A winze in the bottom of this level is worth 20*l.* per fm. for the length of the winze, 9 ft. Two stopes in back of this level are worth 12*l.* and 8*l.* per fm. respectively. The 84, west of King's, is unproductive at present. A stope in the back of this level is worth 7*l.* per fm. for tin. The back of the 48, west of King's, is worth 10*l.* per fm. for tin. The stope in the 74, west of Sleggan's, is worth 9*l.* per fm. We have cut a branch in the 74 cross-cut, south of Vivian's engine-shaft, composed of mundic and spots of ore; we are pushing on the level south. The 74, east of Butler's, is worth 7*l.* per fm. The stopes in the 64, east of Butler's, are worth 10*l.*, 8*l.*, and 9*l.* per fm.

GREAT NORTH LAXEY.—R. Rowe, July 7: The lode in the 110 end has increased in size, now 3 ft. wide, composed of quartz chiefly, and mixed with lead. The lode in the 96 fm. level end is at present small and poor; this we expected, judging from the ground above before entering on the new or northern run of ore ground. The lode in the 84 end north is 2 feet wide, and worth ½ ton of lead per fathom; and in the 73 end it is 3 ft. wide, worth 1 ton of lead per fm. The sump sinking below the 27, south of engine-shaft, is down 5 fathoms, in a lode varying in value from 15 to 25 cwts. of lead per fathom. We sold on Friday last 40 tons of lead, at 13*l.* 5s. per ton.

GREAT RETALLACK.—G. R. Odgers, J. Harris, July 3: Setting Report: No. 1 Lode: The 40 to drive both north and south of No. 1 shaft, by six men, at 90s. per fathom; the lode is 2 ft. wide in each end, with good stones of lead. The 30 to drive south, by four men, at 80s. per fm.; the lode is 18 in. wide, containing good stones of lead; ground driven last month, 3 fms. 3 in. The 30 north by six men, at 84s. per fm.; the lode is disordered by a slide; ground driven last month, 5 fms. 1 ft. 6 in.—No. 2 Shaft: The engine-shaft is 5 fathoms below the 40, and we hope in two months this shaft will be at the 50; the lode is 18 in. wide, composed of friable quartz and flookan, containing good lead, embedded in a beautiful channel of ground for producing that metal, hence we cannot understand why we have not met with a bunch of lead ere this. The 40 north by two men and two boys, at 60s. per fathom; the lode is 18 inches wide, which has considerably improved again; to-day it is worth from 5 to 6 cwts. of lead per fathom, and which is now getting under the dip of the northern shoot. We believe when the 50 is brought under the very promising lode we have had at this level that a decided improvement will be the result. The stope above this level by one man and one boy, at 15s. per fathom; the lode is worth from 4 to 5 cwts. per fathom.

GREAT SOUTH CHIVERTON.—J. Nancarrow, July 6: The following work was set to day:—The 20 to drive east by six men, at 3*l.* 15s. per fathom—a fine-looking lode, containing lead to save, and mundic of precisely the same kind we had in the 50 before it reached the lead. The rise above the 20 by two men, at 3*l.* 15s. per fathom; the lode yields 3 cwts. of lead per fathom. The 40 to drive east by three men and three boys, at 5*l.* per fathom; the lode is small. To rise in back of the 40, under Gifford's shaft, by four men, at 8*l.* 10s. per fathom. The rise in back of the 50, under Gifford's shaft, by two men, at 4*l.* per fathom. The 50 to drive west by four men and four boys, at 8*l.* 10s. per fathom; the lode yielding 1 ton of lead per fathom. To rise above the 50 west by six men, at 12*l.* per fathom; the lode yielding 1 ton per fathom, and likely to improve.

GREAT SOUTH TOLGUS.—J. Daw, July 7: In the rise in the back of the 154, over No. 2 cross-cut, the lode is worth 22*l.* per fathom. In the winze sinking below the 154, and west of No. 2 cross-cut, the lode is 3 ft. wide, worth 8*l.* per fathom. In the winze sinking below the 154, and east of No. 1 cross-cut, the lode is worth 5*l.* per fathom. We have commenced about the new stamps, and shall push on with all speed.

GREAT WESTERN.—Edward Rogers, Edmund Rogers, July 7: Fisher's Lode: Thomas's engine-shaft is communicated to the rise from the level below. Pressure shaft men are at the present time engaged casing and diving the shaft from the 20 to the 30 fm. level. The rise in the back of the 10 fm. level, west of Jones's shaft, is also communicated to the winze sunk from the level above. We have, therefore, commenced driving west in the deep adit and 10 fm. levels, but there has not been enough done to ascertain its value in either place. In the 30 fm. level, from surface, the lode is 18 in. wide, worth 3*l.* 10s. per fathom, and passing through profitable ground.—Middle Lode: Curtis's flat-rod shaft

is down to the 30 fm. level; shaft cased and divided to this depth, and the men have just commenced to drive east and west on the course of the lode. In the end east the lode is 18 in. wide, worth 8*l.* per fathom. In the end west the lode is 1 ft. wide, worth 4*l.* per fathom. In the 20 fm. level, driving east, the lode is 2 ft. wide, worth 7*l.* per fathom. In the winze sinking in the bottom of this level the lode is 3½ ft. wide, worth 12*l.* per fathom. In the 7 fm. level, driving east, the lode is 6 in. wide, unproductive.—Caunter Lode: In the 17 fm. level, from surface, the lode is 6 in. wide, producing some good stones of tin.—South Lode: In the adit level, driving west of White's shaft, the lode is 1 ft. wide, worth 4*l.* per fathom.—Stevens's Lode: In the 27 fm. level, driving east of Pump shaft, the lode is 3 ft. wide, producing tinstone that will just pay for stamping.

GREAT WHEAL BADDERN.—W. Giles, J. Jenkin, July 3: In the 75 fm. level cross-cut, north from Hill Brothers shaft, we are glad to say the elvan is looking much better than when we wrote last—that is, more soft, and we believe it cannot be far from the lode; from the appearance of the elvan we believe it is much larger than in the level above, and we hope it will be so; when we reach the lode in this large elvan we shall have a good depth in the same.

GWYDYR PARK.—W. Smyth, July 6: The ground in the Gwyn Lliflon deep adit end is still very hard and spare for driving. There is no particular change in the Vucheslas deep adit end since last report. We are making fair progress in sinking.

HARWOOD.—W. Vipond, July 3: There is not much change yet in Mouncer; there is a little more rider about the vein, but whether it indicates that we are coming near one of the east and west veins or not it is impossible to say. We have sent 25 bings of ore to market, and 5 bings have gone for dues. I expect it will be all off next week.

HINGSTON DOWN CONSOLS.—James Richards, July 8: In the 140 fathom level cross-cut north the ground is somewhat easier, and better progress is being made. In the stope in the bottom of the 130, near Bailey's shaft, the lode continues to yield 2 tons, or 10*l.* worth of ore per fathom. In the stope in the back of the 130, east of Bailey's shaft, the lode is worth 2 tons of ore, or 6*l.* per fathom. In the 100, west of Bailey's shaft, the ground is a little improved for exploring. In the 55, east of Morris's shaft, the lode is 1 ft. wide, composed chiefly of capel and mundic. In the stope in the bottom of the 55, east of Morris's shaft, the lode is worth 2¼ tons of ore, or 8*l.* per fathom. In the deep adit level the ground is now clean killas, and fair progress is being made.

HOLMBUSH AND KELLY BRAY UNITED.—J. Dainty, July 8: The forking of the water is progressing satisfactorily, now down to about the 40 in Kelly Bray. We have nearly cleared up the 35, and as soon as that is done shall commence operations on the new lode. The winze sinking below the 25 is worth 35*l.* per fathom; William's stope, 25*l*; Skinner's, 15*l.*; Matthew's, on the new north lode, 16*l.* per fathom. At Higher Redmoor, on the lead lode, the north end is worth 5 cwts., and the south end 3 cwts. of rich lead ore to the fathom. Everything else is progressing satisfactorily.

LLYWERNOG.—J. Davis, July 7: Our reservoir has been entirely drained for some days, and operations in the 62 are, consequently, suspended. We have not had rain here for nearly six weeks, and all the springs are dried up. A change of weather has, however, set in, and we shall soon resume lower workings. In the 40 the lode is very promising, and produces 12 cwts. of lead ore per fathom. There is every indication of further improvement here. Dressing and surface operations are progressing satisfactorily.

MINERA UNION.—Wm. T. Harris, July 8: Low's Shaft: The lode in the 60 yard level north is 1½ foot wide, yielding occasional stones of lead. The level north, on Sand lode, yields stones of lead, and very promising; I am daily looking for a great improvement here—the ground is favourable for progress. —Brabner's Shaft: The lode in the 80 yard level north is 1 ft. wide, yielding a little lead. The rise in the back of this level produces saving work for lead. —Flue Shaft: The 50 yard level north yields a little lead, but not enough to value—ground very promising. The pitch in the bottom of the 40 yard level is worth 10 cwts. of lead per fathom.

NEW BIRCH TOR AND VITIFER CONSOLS.—W. Skewis, R. Trevarthen, July 8: Hambley's Shaft: The south lode in the 36, east of shaft, is 8 in. wide, worth for tin 8*l.* per fathom; this end has been improving from the time we resumed its driving, and is going into entirely new and untried ground, therefore we have reason to expect that profitable discoveries will be made as this ground is developed. The lode in the winze sinking below the 24, west of shaft, is 2 ft. wide, yielding tin to the value of 7*l.* 10s. per fathom; this is laying open profitable tin ground. The pitches on this part are about the same value as they have been for the last two months.—New Shaft: In the 60 west the lode is increasing in size, now from 12 to 15 in. wide, and of a more promising character than it has been for the last 3 fms. driving, and we are expecting daily to be able to make a discovery to value. We have ten pitches working on this lode, at tributes varying from 10s. to 13s. 4d. in 1*l.* Prideaux's shaft is sunk the required depth for a 22 fm. level, with pitwork and footway fixed, also divided and cased complete for drawing to this depth. The 22 is now set to drive east and west at 5*l.* per fathom; the lode in each of the ends is 3 ft. wide, yielding good stones of tin. We have set a winze to sink in the bottom of the 10, about 10 fms. east of shaft, at 5*l.* per fathom. This winze will be sunk as quickly as possible to ventilate the 22 as soon as it reaches this point, and we expect that it will also lay open profitable tin ground. The 10 east is suspended for the time, and the men removed to sink a winze in the bottom of the adit to communicate with and ventilate the 10 fm. level end. The lode in the winze is 3 ft. wide, worth 7*l.* per fathom, and seems likely to further improve. We have two pitches working in back of the 10, at 11s. and 12s. in 1*l.* All other operations are proceeding much as usual.

NEW CROW HILL.—A. Kent, T. Trelease, July 6: Good progress is being made in sinking the engine-shaft; the ground is still favourable for so doing, and everything works well.—Wheal Louisa: We are making good progress in extending the 75 fm. level east; the lode in the end at present is about 4 ft. wide, composed of capel, peach, and flookan, and thickly interspersed with mundic. We are now getting near the point below the bottom of the winze which is sunk below the 60 fm. level.

NEW GREAT CONSOLS.—R. Pryor, R. Trathen, T. Bennetts, July 5: During the past week the shaftmen have been engaged in taking out the old 19-in. broken pump, and putting in the new one, which is completed, and all the machinery at present is in good condition, and working well. We have holed Renale's new shaft to the Old Broad Gate with a borer-hole, which has let down the surface water, and has given good ventilation. We have about 7 or 8 feet more to sink to complete the sinking of this shaft. All the stopes and bargains throughout the mine are looking fully as well as for some time past. Saturday next being our pay and setting, a full report shall be sent you.

NEW TRELEIGH.—S. Michell, July 8: The lode driving west in the 86 fm. level is 18 in. wide, composed of peach, quartz, mundic, and good stones of ore, and discharging a large stream of water. The 78, west of new shaft, is worth 2 tons of ore per fathom, and also very wet; the reason I mention the water flowing so freely from this level is that I believe a large lode is not far ahead of us. The 78, east of shaft, is worth 1¼ ton of ore per fathom; the lode today appears to be opening wider. The stopes throughout are much the same as when last reported. If any alteration should take place in the bottom level I will communicate it at once, and am urging on this part as fast as possible to see how the lode will improve in depth.

NEW WHEAL LOVELL.—C. Bawden, J. Priske, July 7: The lode in the 40, east of Lanyon's, is 4 ft. wide, and worth 15*l.* per fathom—a very promising end, with every appearance of making a rich bunch of tin. The lode in the bottom of Lanyon's shaft has been cut through, and proves to be 12 feet wide; the men have again resumed the sinking. The lode at this point shows every indication of nearing another of those bunches for which this district is so famous. A shaft on the new lode, in the eastern part of the sett, has been cleared up 9 fms., where the lode is 1½ foot wide, and carrying a leader of tin 8 in. wide—very good work. This is an important discovery, as it is in virgin ground for 200 fms. long. Altogether the mine is improving.

NEW WHEAL TOWAN.—R. Pryor, July 7: All being well, we intend taking down the lode in the adit level on Friday next, when its size and value I will report on fully. The ground in the end is a little more favourable for driving.

NORTH DOWNS.—J. Williams, July 6: In the 85, west of King's engine-shaft, the lode is 4 ft. wide, composed of capel, mundic, spar, and a little copper ore; this end is very wet and troublesome for driving at present, but we expect a change for the better as we approach the point of horse. The lode in the 70, west of sump-winze, is not quite so good as when last reported, now worth 15*l.* per fathom. The winze sinking in the bottom of the 60, west of the sump-winze, is suspended for the present; the water for the last 6 ft. has increased so rapidly that it is more than can be kept away with manual labour. We shall soon drain this with the 70, when it will be resumed. The stope in the bottom of the 60, west of the sump-winze, is worth 18*l.* per fathom. A midway level, driving above the back of the 60, is worth 9*l.* per fathom.—South Lode: The 60, west of cross-cut, is not looking so well, as a cross branch of spar has disordered the lode, now worth 4*l.* per fathom. The winze sinking below the 60, on this lode, has improved, worth 9*l.* per fathom, and promising to further improve. We are getting on with the dressing of our next sampling, which will exceed the last.

NORTH RETALLACK.—G. R. Odgers, J. Harris, July 3: The 20 fathom level to drive north, by six men, at 70s. per fm.; the lode is 15 inches wide, composed of quartz and good stones of lead. We hope now to make much more progress.

NORTH RETALLACK.—G. R. Odgers, J. Harris, July 7: The lode in the 20, north from the No. 1 boundary shaft, is 15 in. wide, containing a little more lead than it did on Saturday—saving work.

NORTH ROSKEAR.—R. Goldsworthy, R. Angove, July 7: During the past month the 240 fm. level, west from Doctor's shaft, has been extended 2 fms. 2 ft. 4 in.; total distance from shaft, 5 fms. 7 in.; the lode in this end is small and poor, but we are pushing it on with all speed, to get under the tin ground laid open in the 230 fm. level. The 216 fm. level, west from Pearce's shaft, measures 1 fm. 2 ft. 8 in.; total distance from the shaft, 3 fms. 0 ft. 6 in.; the lode in this end is 1 ft. wide, composed of quartz, mundic, and peach, but not to value. The 140 fm. level cross-cut, south from Wheal Seton, towards our north lode, has been extended 1 fm. 1 ft. 4 in., and have about 8 fms. more to drive to reach the object; we are passing through a channel of very hard rock, in which our progress is slow. There is no alteration in any of the tin stopes. We sold, on July 2, 9 tons 0 cwts. 0 qrs. 14 lbs. of black tin, for 625*l.* 18s. 8d.; and weighed off 48 tons 3 cwts. of copper ore, realising 243*l.* 2s. 5d.

NORTH TRESKERBY.—R. Pryor, T. Jenkin, July 8: Tresidder's Shaft: The lode in the 130 fm. level end, east of shaft, continues to open up tribute ground. The lode in the 120 fm. level end east has improved, and is now worth fully 1¼ ton of ore per fathom, and presents such an appearance as to induce us to say that a still further improvement may be shortly expected. The lode in the 110 fm. level end east is producing 4 tons of ore per fathom; and the lode in the stopes in the back of this level is worth 3 tons of ore per fathom. The ground in the 100 east has improved, and, judging from present appearances, we are led to think that a good result may shortly be expected at this point. The tutwork bargains, as a whole, are looking better than for some time past.

PEDN-AN-DREA UNITED.—W. Tregay, J. Thomas, July 3: Sump: The sumpmen are engaged cutting hitches for penthouse, and making other preparations for sinking. In the 140 east the lode is worth 8*l.* per fathom. In the 140, west of the cross-course, the lode is worth 40*l.* per fathom. In the winze in the 120 west the lode is worth 8*l.* per fathom. In the 120 cross-cut north the men have been fixing a railway, for the speedier transit of the stuff broken, consequently have made but little progress in cross-cutting for the week, but this will enable us to proceed in future more rapidly. In the rise in the 100 east the ground is favourable for rising, the lode producing occasional stones of tin. In the 68 east the tinstone is still of coarse quality, but we still expect to find much tin among the large rocks further east.—Cobbler's: Martin's Lode, 120 west: No change in either the end or rise; the lode slightly productive, letting out much water, and the ground favourable for exploration.—North Lode: In the 90 east the lode is worth 25*l.* per fathom. In the 90 west the lode is worth 15*l.* per fm. In the 90 rise the lode, being in the cross-course, is very variable at present, being worth 15*l.* per fathom.—North Shaft: In the 55 west the lode is worth 40*l.* per fathom. In the 47 east the lode has not yet been cut into in the new or eastern cross-cut, but we believe that we have the south or footwall of the lode here, and that we shall cut into it next week. In the 47 west the lode is worth 25*l.* per fathom. We sold to-day, at Trethellan, 6 tons 6 cwts. 3 qrs. 4 lbs. of black tin, for 444*l.* 16s. 2d.

PENHALE UNITED.—R. Pryor, H. Bennetts, J. Pryor, July 7: Phillips's Engine-shaft: The sinking of this shaft will be completed to the 100 in about a week, when the lode that is standing for the last 2 fms. sinking will be taken down, and its size and value fully reported on. The lode in the 90, driving south of engine-shaft, is 2½ ft. wide, and worth 3 cwts. of lead per fathom. In the 70, driving south of shaft, the lode is 18 in. wide, producing good stones of lead of a most promising character.—Hall's Shaft: The lode in this shaft sinking below the 90 is not quite so good, being a little disordered by a cross branch, and only now worth 6 cwts. of lead per fathom; the ground here continues favourable for sinking, which is a good indication. The lode in the 90, driving north of this shaft, is 2 ft. wide, worth 6 cwts. of lead per fathom, and every appearance of a further improvement. The lode in the 80, driving north of shaft, is at present disordered, and only producing stones of lead. The tribute pitches throughout the mine continue much the same as last reported. The new crusher is working splendid, and all the machinery is in good condition.

PENHALE WHEAL VOR.—W. H. Martin, July 7: In the engine-shaft we shall resume the sinking below the 110 to-morrow. There is no change to remark in the 110 fm. level north cross-cut since last advised. Ritchie's shaftmen are making fair progress in sinking below the 75; at present the lode is disordered, and is intermixed with capels and spar, with branches of mundic running through it.

PICKARDS DOWN SILVER-LEAD.—J. Richards, July 7: The shaft is down 10 fathoms, and about 2 fathoms has already been driven towards the lode which we hope to intersect this month, supposing the ground, &c., continues favourable.

PRINCE OF WALES.—J. and W. Gifford, July 5: Watson's engine-shaft is progressing very favourably, and we hope to complete the 12 fms. by the end of the month. In the 65 east we are driving by the side of the lode; where last taken down it is 3 ft. wide, yielding a little saving work, but not to value. In the 65 west we have just cut through the western part of the cross-course; the lode west of it, so far as seen, is 5 ft. wide, with neither of the walls showing, worth 15*l.* per fathom, and every appearance of improving. We have two stopes in back of the 65, worth 15*l.* per fathom each. In the 55, both east and west, there is no change to notice. In the 55 cross-cut north we are daily cutting small branches of capel, copper ore, and mundic, which shows the strata being highly mineralised. In the 55 cross-cut south there is no change. The stope in back of the 55 east is worth 30*l.* per fathom. The stope in back of the 55 west is worth 12*l.* per fathom. The stope in back of the 45 west is worth 10*l.* per fm.

— July 8: In the 65 west the lode, so far as seen, is 6 ft. wide, worth 20*l.* per fathom, and improving. All other points the same.

PRINCESS OF WALES.—Thos. Foote, G. Rickard, July 7: The ground in Harris's engine-shaft is precisely of the same mineralised character as mentioned in our last week's report. The branches or feeders are all dipping north towards the great gossan lode, and showing in places good stones of rich-quality copper ore; this augurs well upon cutting the lode at the 35 fm. level, which we are using every effort to reach as fast as possible.

REDMOOR.—T. Taylor, July 8: There is no change in the gossan lode. Having but little water for stamping, I have put two of the men in the western end in the 25. We are still driving on the south part of this lode; the ground is easy, requires timbering, letting out a deal of water, and producing good stones of tin and copper ore. I think as we reach the run of the slide through the great gossan we shall find good deposits. I have taken the run of Holmbush lead lode, and will send you a rough sketch as soon as possible of this part of the sett.

SNAEFELL.—H. James, July 5: The lode in the engine-shaft sinking below the 75 continues about the same as for some time past; the ground is harder, and favourable for the production of ore. In the 75 north the lode is about 2 ft. wide, of a promising appearance, but so far unproductive. In the 60 north the lode is improving as we advance; we have now in the end a rib of steel ore about 2 in. wide. This end, from appearances, is entering on the bunch of ore the 40 fm. level sump was sunk on, being what we term the first bunch, showing the dip north to be about 9 or 10 fathoms from the 40 down to the 60. This more recent, or No. 2 bunch, cut in the 40 will be about 15 fathoms beyond this present end; seeing this, we have have reason to hope that the driving of this level will now begin to lay open some good productive ground. In the 50 north there is no change to notice; the ore ground last cut in the 40 being still quite beyond this end. In the 40 north the lode in the present end is about 8 inches wide, producing some rich lead and blende, and judging from the appearance of the lode and ground generally is likely to continue.

SOUTH CONDURROW.—J. Vivian, July 7: We have not yet met with the wall in the 71 fm. level cross-cut, driving south-west of King's shaft. In the 51, west of Vivian's shaft, the lode is 4 feet wide, and worth 12*l.* per fathom. In the same level, east of Tye shaft, the lode is 3 feet wide, improved in appearance, and worth 9*l.* per fathom. In the 51 fm. level cross-cut north, west of King's shaft, No. 1 lode in the west end, is 3 ft. wide, and worth 7*l.* per fathom. No. 2 lode, east from the same cross-cut, is about 6 in. wide, saving work. In the 61, west of King's shaft, the lode is improved, being now 4 feet wide, and worth 14*l.* per fathom. In the winze sinking below the 61, west of King's shaft, the part of the lode that we are carrying is worth 30*l.* per fathom. The other parts of the mine are just the same as last reported on. The masons are getting on rather slow with the engine-house, however, we hope to fix the main bob in its place at about the 17th inst. All the other work is going on well, but the water is very slack on the stamping mills.

SOUTH DARREN.—J. Boundy, W. H. Boundy, July 5: There is no particular change to notice in either of the ends or stopes since the last report. We sampled on Saturday last 30 tons of silver-lead ore. Surface water still very scarce.

SOUTH HERODSFOOT.—W. Goldsworthy, July 8: We continue to make good progress in the cross-cut in the 100; the ground is still of a favourable character, being a nice-looking killas, intermixed with floors of spar and prian, and letting out water.

SOUTH MERLLYN.—H. R. Harvey, July 8: The ground in the 40, north of Bartlett's shaft, is easier than it has been, and in consequence more progress can be made. The appearances in the end are very favourable, and I am driving with all speed, as I feel certain we shall soon reach rich lead-bearing ground. I hope soon to report a change in the 40 south; the appearances are very favourable at this point also. We have a fair quantity of ore broken.

SOUTH TREVENNA.—W. H. Willcock, July 7: I fully inspected the underground workings of this mine in the early part of last week, and was underground on Thursday with another agent, who expressed himself satisfied with the present workings of the mine. This prevented my report being forwarded in time for last week's Journal. Since the discharge of the local agent we have been enabled to get ample supplies of tinstuff for the stamps, so as to keep them going day and night, and I expect by the end of the month to have a batch to send to the smelters; before this a double force of labour had been employed on the mine, and the returns, instead of increasing in proportion, were gradually lessening. The directors removed this party, he was paid up, and has since no further control of the mine. I have men to work on two very productive stopes of tin. In No. 1 stope, upon No. 2 lode, about 6 fms. under the adit east of the winze, the lode is 4 ft. wide, carrying a branch rich in tin. No. 2 stope is of the same character, both producing good work. The works to the west of the winze, on No. 2 lode, I am preparing to open out, and expect to have similar results as in the stope to the east. It is also my intention of continuing the drivage west of the bottom level 48 fms. from surface, upon No. 2 lode; at present the lode is poor, and not productive enough to send to surface; but from appearances I expect a favourable change, even within a fathom or so of ground, which will be of great importance, as my opinion is that our rich leader of tin will make larger westward, and on which we have a long run, and when opened will give a large supply of tinstuff. This mine is of great value, and fully equal to the representations given of it; and I hope soon to show this in the way most satisfactory to all interested by the increase of the returns.

ST. JUST AMALGAMATED.—R. Pryor, Thos. Gundry, N. Bartle, July 6: Saturday last being our pay and setting, the following bargains were set: The 110 to drive east of Saveall's engine-shaft, by two men, at 4*l.* per fathom; lode worth 3*l.* per fm. This level to drive west of shaft, by two men, at 3*l.* 10s.; lode large, and producing tinstuff of low quality. The 100 to drive east of shaft, by two men, at 2*l.* 10s. per fathom: lode 3 ft. wide, and worth 3*l.* per fathom. This level to drive west of shaft, by two men, at 6*l.* 10s. per fathom; the lode here at present is hard, and only producing tinstuff of low quality; in driving this end a little further we shall come under some good tin ground driven through in the level above. The 90 to drive west of engine-shaft, by two men, at 3*l.* 5s. per fathom; lode 2½ ft. wide, and worth 5*l.* per fathom. The 62 fm. level to drive west of shaft, by two men, at 3*l.* 5s.; this end is opening up tribute ground that will pay for taking away. The winze to sink below this level by four men, at 8*l.* per fathom; lode worth 7*l.* per fathom.—Pryor's Lode: The 62 to drive west of cross-cut, by two men, at 4*l.* per fathom; the lode at this time is small, and only worth 3*l.* per fathom. The winze to sink below this level by four men, at 6*l.* per fathom; lode worth 15*l.* per fathom; this is an important feature, there being no level under it. We hope to commence shortly to drain the water out of the north lode shaft, and put out a cross-cut in the 86 fm. level to intersect this lode, a distance of about 13 or 14 fms., which will drain this lode for 24 fathoms in height, and it is likely to lay open a large piece of profitable ground, about 20 fms. further east of the last-named winze, we have set another to sink below this level, on the south part of Pryor's lode, by two men, at 5*l.* per fathom; the lode here is worth 3*l.* per fathom. This will unite with the other part of the lode in sinking about 5 or 6 fathoms, where an improvement may be fairly looked for. The 40 to drive east of the north shaft, on the north lode, by two men, at 4*l.* per fathom; the lode at present is small, and producing a little tin.—Owl Lode: The rise in back of the 40, north of Reddipper shaft, by two men, at 5*l.* per fathom; lode worth 5*l.* per fathom. This when communicated to the level above will lay open some good tribute ground. The 20 to drive west of West Buck shaft, by four men, at 6*l.* 10s. per fathom; the lode here has improved, and worth 7*l.* per fathom. A rise in the back of the 20 fathom level, south of Saveall's shaft, by two men, at 4*l.* 10s. per fathom; the lode is worth 5*l.* per fathom. The 20 to drive west of West Buck shaft, by two men, at 8*l.* 10s. per fathom; the lode at the present time is very hard, and only producing stones of tin, but judging from its appearance we think that a change for the better will be shortly met with. The 10 to drive west of shaft by two men, at 6*l.* per fm.; the lode is worth 7*l.* per fathom. This level to drive west of shaft, on branch, by two men, at 7*l.* 10s. per fm.; the lode is yielding tinstuff of low quality, and promising for an improvement. The adit level to drive west of shaft, by two men, at 6*l.* per fathom; the lode is producing good stones of tin; this level has opened up a large quantity of valuable ground, but for some time past the end has been in a hard bar of ground, which is frequently met with between the shoots of tin. The 30 to drive east of Reddipper shaft, by two men, at 3*l.* 10s. per fm.: the lode is worth 3*l.* per fm. The 20 to drive east of shaft, by two men, at 3*l.* per fm.; the lode is worth 4*l.* per fm. The 10 to drive east of ditto, by two men, at 4*l.* 10s. per fm.; the lode is worth 4*l.* per fm. We also set 50 tribute pitches, at tributes varying from 8s. and upwards in 1*l.*

TAMAR VALLEY.—J. Goldsworthy, July 8: The ground in the 57 cross-cut, driving towards the Tamar Valley lode, is of a highly mineralised character. The intersection of the lode is looked forward to very shortly, as the distance, judging by the bearing of the lode as seen in the north shaft, is now very little. The cross-cut is extended 18½ fms. There is no change worth mentioning in any other parts of the mine.

TREWETHA.—T. Foote, John Scoble, July 7: Friday last being our setting-day, the following bargains and pitches were set. To sink the north engine-shaft under the 50 fm. level, 2 fms. stent, by nine men, at 22*l.* per fathom, and to carry ground for plunger depth under the 50 fm. level, 9 fms. 1 foot. To drive north at this level, 4 fms. stent, by four men; lode 2 feet wide, at present poor, but a kindly lode. One stope in the back of this level, to four men, stented 12 fms., at 17s. 6d. per fathom, worth 5 cwts. One stope to four men, stented 12 fms., at 20s. per fathom, worth 6 cwts. of lead per fathom. The winze in the bottom of the 40 fm. level south, to four men, stented 2 fathoms, at 4*l.* 10s. per fathom—in disordered ground. This level to drive north, by four men, stented 3 fms., at 4*l.* per fathom; the lode is 3 feet wide, worth 3 cwts. of lead per fm. Two stopes in the back of this level, No. 1 to four men, stent 10 fathoms, at 20s. producing 5 cwts.; No. 2 to four men, at 17s. 6d., worth 4 cwts. of lead per fm. The 50 south to four men, stented 4 fathoms, at 3*l.* 15s. per fathom; lode 3 feet wide, worth 6 cwts. of lead per fathom, a very kindly lode. To drive the 30 north to four men, stented 5 fathoms, at 3*l.* per fathom; lode 2½ ft. wide, poor. One stope in the back of this level to four men, stented 10 fms., at 20s. per fm., worth 4 cwts. of lead per fathom.—South Mine: To drive the 63 fm. level cross-cut, west of Harris's shaft, stented 4 fathoms, to six men, at 3*l.* per fathom. To drive the 53 south to two men, stented 2 fathoms, at 3*l.* 10s. per fathom; lode 3 feet wide, worth 4 cwts. of lead per fathom. Harris's Shaft is divided, cased, and made complete to the 63 fm. level.—Ward's Shaft: The 33 to drive south to four men, at 2*l.* 5s., stent 4 fathoms, and to have 6*l.* per ton for the lead. Three pitches in the back of this level to twelve men, at 12*l.*, 11*l.*, and 9*l.* per ton for two months. Three pitches in the back of the 23 fm. level, to twelve men, for two months, at 13*l.*, 12*l.*, and 13*l.* per ton, free of drawing, for two months. Engines working well, and the pitwork in good order progressing as fast as we possibly can towards the next sampling.

TREREW.—July 5: The lode in the 20 south is a little harder than on Monday last, but still it is very good ground, and continues to yield good stones of lead. There has been stones of lead broken 16 lbs. each, better stones than those sent to the office last week. The lode in the footway shaft is also more kindly; it is a beautiful gossan, with spots of lead. There were some good dredge stones of lead broken last week.

VAN CONSOLS.—J. Corfield, July 8: In the 30, east of engine-shaft, the lode is very promising, and we are daily expecting to cut into a bunch of lead. In the barytes stopes there is still very rich lead. The eastern cross-cut is cleared on to the lode about 4 fms. from the entrance, where the lode is very large, and of a promising character. We have also cleared a side level 5 fms. on to the shaft, which is 20 fms. south of the main lode. We are now clearing the cross-cut further, to get on to the level on the course of the lode, where several tons of lead were raised.

VIGRA AND CLOGAU.—W. J. Cooke, July 8: St. David's Lode—No. 2 Mine: There is little alteration to notice in the drivage west from No. 6 shaft; the hanging-wall has not yet been met with. The lode in the drivage east is 4 ft. wide, opening out to 5 ft. 6 in. in the roof; the character of the quartz is much improved, and fair progress is being made.

WEST BASSET.—George Lightly, July 7: I am not able to report any improvement in our operations at this mine during the past week. The several points continue much the same as for some time past.

WEST CARADON.—W. Johns, N. Richards, July 6: Marina's shaft will be down 12 fathoms below the 30, or 42 fathoms from surface, and the cross-cutting commenced towards the lodes by the early part of next week. Allen's lode, in the 30, east of the cross-cut, is looking very well, worth about 2½ tons of copper ore per fathom. The rise in the back of this level is worth 2 tons per fathom. The lode in the winze sinking below this level within the last 6 feet has very much improved, and is now worth 1½ ton per fathom; this looks very kindly for the ore to be making down. No alteration has taken place in the 170, on the branch east of the cross-cut and north of Allen's lode, since last reported on.

WEST CWMYSTWITH.—R. Williams, July 7: The prospects at this mine are most cheering: for the last few days we have been clearing an adit level on the south lode, which is all extracted for many fathoms in length from the roof to the surface, but in clearing up the sole of the level we have opened on a vein of lead 6 in. wide, as solid as can be, while in the roof immediately over there is a good branch of lead from 2 to 3 fms. long; we shall continue to clear this level, where there is every prospect of discovering a guarantee for productiveness between this point and the deep adit, in which we have a fine masterly lode, composed of gossan, quartz, sulphur, and lead; of the latter there a branch in the roof from 4 to 6 in. wide; and, on the whole, I can safely say that for size, strength, and congenial composition there is not a finer nor more promising lode for the production of lead in Cardiganshire, and when properly laid open, I see no reason why this mine should not prove equally as productive as the old Cwmystwith, which immediately adjoins it on the east, and whose workings are now within a short distance of this mine, and their lode running into it.

WEST PRINCE OF WALES.—W. C. Cock, July 6: We are making fair progress in sinking the north engine-shaft; the floor we are now sinking through is not of so light a colour as those we have recently had; but as they vary in this respect I hope the change is only temporary.

WEST WHEAL TREMAYNE.—S. Roberts, July 6: We are progressing favourably with driving the 44 fm. level cross-cut south; the cross lode is large, and ground easy for driving. The lode in the 20, on the south lode, has very much enlarged since last week, being now 2 feet wide, yielding saving work for tin. In Sutton's shaft the ground has much improved, consequently the sinking is going on with greater speed; the lode has taken a more downright direction, and we thought it best to continue the course of the shaft on its former angle, as we expect the lode to fall into it again shortly. We have ventilated the shaft by putting down air-pipes.

WHEAL AGAR.—E. Rogers, July 7: We have not broken any more of the lode in the engine-shaft since last week, the men being engaged in cutting ground for bearers and cistern, &c., to fix a plunger-lift; to finish the whole of this work will take another fortnight. The lode in the 130 is again improving. No change in other places of operation.

WHEAL BULLER.—Jas. Inch, Jas. Brown, July 7: Hocking's shaft is sunk about 6 fms. under the 92; the ground in this shaft is getting easier for progress, the hard floor of elvan is wearing out, and the lode is presenting a more kindly appearance, producing stamping work for tin. The 70, driving east, on the north lode, is producing tinstuff, but not to value. No. 1 stope, under this level, is worth for tin 25*l.* per fathom. No. 2 stope, under this level, is worth for tin 25*l.* per fathom. A stope in the back of this level, east of Knuckey's winze, is worth 10*l.* per fathom. A stope under the 60, west of Bartle's winze, is worth 9*l.* per fathom. A stope under this level, west of the cross-course, is worth 12*l.* per fathom.—Kistle's Shaft: The 60, driving west, on the south part of the lode, is producing stamping work for tin. The 50, driving east of the points of horse, on the north part of the lode, is worth for tin 10*l.* per fathom. A stope in the back of this level is worth 8*l.* per fathom.—Stevens's Shaft: In the 92, driving east, the lode is unproductive. In the 80, driving south, we have not through the lode. We are getting on well with the dressing of the next batch of tin. Our machinery and pitwork are working well.

WHEAL COURTENAY.—J. Gifford, July 6: In the deep adit west the lode is looking a little more kindly, having a branch of mundic on the hanging wall 8 inches wide, with spots of copper ore intermixed. No change in the cross-cut north to notice.

WHEAL CREBOR.—J. Gifford, July 6: In Kelly's shaft the lode is 4 ft. wide, composed principally of capel, quartz, and arsenical mundic, with spots of copper ore intermixed—a strong and kindly lode. In the 120 east we commenced rising against the winze in the 108 to-day; ground favourable, with a good lode in the bottom of the winze. No change in the 96, east or west, on the south lode. The tribute department is much the same as for some time past. We are getting on well with our dressing, and hope to sample between 60 and 70 tons at the end of this month.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 3: The lode in the 140 west, and the rise above the 130, is without any alteration since our advise of June 26. The lode in the 100 east is 3 ft. wide, worth 9*l.* per fathom. The lode in the 80 west is worth 8*l.* per fathom. The lode in the 66 west is worth 17*l.* per fathom. The lode in the 54 west is worth 5*l.* per fathom, and 18 inches wide. The lode in the 42 east is worth 3*l.* 10s. per fathom. In the 90 fm. level cross-cut north the ground continues of the same favourable character, and which is yielding more tin than we expected, hence we hope shortly to cut the main part of the lode. The dropper east is worth 12*l.* per fathom.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, July 8: The ground in the 90 fm. level cross-cut, north from the main lode, and all the other places in this mine are looking much the same as we stated in our last report.

WHEAL IDA.—S. Harpur, July 2: In the 40 fathom level cross-cut, north of the shaft, the ground is now moderately easy for driving, composed of light coloured killas or clay-slate. Since our last meeting we have driven a little to the east of this cross-cut, on the branch reported on at the last meeting; it is at present stopped, and we have commenced driving north again. The ground in the south cross-cut is not so favourable for driving as it has been, composed of killas and spar, and letting out a little more water. The engine and pitwork are in good working order. I would, in conclusion, observe that due regard shall be paid to the economical working of the mine.

WHEAL KITTY (St. Agnes).—W. Polkinghorne, S. Davey, July 3: In the 82 fm. level, driving west of Holgate's shaft, the lode is worth for tin 6*l.* per fathom.—New Shaft, Pryor's Lode: In the 106 fm. level cross-cut, driving south of shaft, we have met with an increase of water during the past week, which leads us to think that we are near to the lode. In the 94, driving west of shaft, the lode is much the same as last reported, worth for tin 25*l.* per fathom. In the 94, driving east of shaft, the lode is worth for tin 11*l.* per fathom. In the 82, driving west of shaft, the lode is 2 ft. wide, and worth for tin 15*l.* per fathom. In the 82, driving east of shaft, the lode is poor. The lode in the winze sinking below the 82 is large, and worth for tin 6*l.* per fathom.—Caunter Lode: In the 82, driving north of shaft, the lode is disordered by a gossan. In the winze sinking below the 82, on the caunter, the lode is worth for tin 8*l.* per fathom. In the 44, driving east of cross-cut, north of Pryor's, the branch is yielding good work for tin.

WHEAL MARY ANN (Liskeard).—P. Clymo, J. Harris, J. Stevens, J. Skeat, July 7: Clymo's shaftmen are still engaged fixing plunger-lift, &c., from the 230 to the 240. The cross-cut in the 240 is extended 14 fms. towards the lode. In the 230 north the lode is still small and unproductive. In the same level south the lode is 3 ft. wide, worth 13*l.* per fathom. The lode in the 220 north is at present small and poor. In the same level south the lode is 2 ft. wide, worth 8*l.* per fathom. There is no change to notice in the 210 north or south since last reported on. In the 200 north the lode is 3 ft. wide, worth 6*l.* per fathom. In the 190 north the lode is 2 ft. wide, producing good stones of ore. The stopes and pitches are producing much as usual. We sold, on June 24, to Messrs. Sheldon, Bush, and Co., our No. 1 parcel of silver-lead ores, computed 60 tons, at 24*l.* 3s. per ton, and to Messrs. the Trustees of Treffry Estate our No. 2 parcel, computed 38 tons, at 15*l.* 0s. 6d. per ton.

WHEAL SPARNON.—W. Tregay, July 3: The lode in the 30, west of the cross-cut and cross-course, produces good stones of copper ore, and looks promising for improvement; ground favourable for driving.

WHEAL UNY.—J. Daw, S. Coade, M. Rogers, July 3: We have not made much progress in sinking the engine-shaft in the past quarter, owing to the mine not being forked to the bottom until six weeks after the last meeting; and in the last month the sumpmen have been employed in taking down the north part of the lode, in which we intend to sink the shaft; this part of the lode has a more promising appearance for tin, and is now worth 30*l.* per fm. The 140, east of engine-shaft, is driven through the cross-course; the lode in the end, for 6 feet in width, and is worth 20*l.* per fathom. In the 130, east of engine-shaft, the lode is worth 12*l.* per fathom. In the 120, east of engine-shaft, the lode is worth 20*l.* per fathom. In the 110, east of Goodinge's shaft, the lode is worth 12*l.* per fathom. In the 120, west of incline shaft, the lode is worth 10*l.* per fathom. The stopes throughout the mine are producing tinstuff of the usual quality. Hind's engine-shaft is sunk 15 fms. below the surface; it is cased and divided; and put in a good position for sinking. The rise in the back of the 80 fm. level cross-cut is up 5 fathoms. To facilitate the rising we have put a railroad in the cross-cut and also an air-machine; by doing this we are able to get on faster with the work. We are pushing on the shaft and rise with all speed, working all the time except Sundays. We shall commence about the

alteration of the pumping-engine after next week, as part of the new work is on the mine, and the remainded will be sent in a few days. The prospects of the mine continue to look well, and we hope to return in the next quarter not less than 70 tons of tin. The Hind's 70-in. cylinder engine is nearly all on the mine, and we have set the house to build. The masons will commence next week.

COAL IN SOUTH STAFFORDSHIRE AND SHROPSHIRE.

The Dudley and Midland Geological Society, last week, made one of the most interesting excursions they have ever undertaken. It was interesting both as a purely geological excursion and as one bearing upon the future mineral resources of the Black Country. By the kind permission of the Earl of DUDLEY, through Mr. FREDERICK SMITH, his lordship's principal agent, the members were permitted to visit and inspect the second trial, or proof heading, driven across the western boundary fault into the Permian beds in his lordship's Himley Colliery. The party were taken to No. 3 Pit of the colliery by the Earl of DUDLEY'S private railroad. About 74 descended the shaft. When they reached the bottom they found themselves in spacious and well-illuminated passages leading to huge caverns or chambers, where the whole thickness of the 30-ft. seam is being taken out. In one large chamber no less than 6 yards of thick coal had been purposely dislodged, and lay ready for loading into the tubs. The space was lighted, with a wonderfully beautiful effect, by red and blue lights. A partly exhausted chamber, or side of work, where several pillars have been left standing, and where the fallen roof or debris of the mine lay in immense blocks of rock, was similarly illuminated. By the aid of the lights the eye was carried far into the innermost recesses of the mine, and gave a conception of what may be truly termed the grandeur of an illuminated thick coal mine.

The next and greatest object of interest was the examination of a trial headway driven from the floor of the Thick coal across the western boundary fault of the coal field, into what was unanimously considered to be the Permian beds, at a depth from the surface of about 190 yards. After carefully examining the passage from the coal measure rocks into the red beds, and making a selection of characteristic specimens of the ground driven through, the party were conveyed to the surface, and took lunch together (provided by the Earl of DUDLEY) in the engine-house adjoining. The repast over, Mr. W. SPRUCE, the mine agent at the colliery, and his son, Mr. G. SPRUCE, explained a number of plans and sections which hung round the room. These interesting records had been prepared with considerable care, and were intended to illustrate the difference of the termination of the coal measures against the Permian beds, as compared with that shown by a section made by Mr. J. HUGHES sometime ago, of another proof heading driven into the same red rocks 300 or 400 yards south of the one inspected that day. The difference was very marked, for while the coal measures in the first section on approaching the fault assumed the upturned shape of the letter S, the other dipped towards the red rocks as in the upper part of a letter S. Mr. SPRUCE said that another proof heading was contemplated, to be driven at a pit a quarter of a mile further north. A general discussion ensued as to the indications which these explorations along the western boundary fault of the South Staffordshire coal field, and those along the eastern side of the Shropshire coal field, gave of coal being likely to exist in the great tract of New Red Sandstone and Permian country lying between the two coal fields. Mr. SPRUCE, Mr. HENRY JOHNSON, Mr. JEFFERIES, Mr. PARTON, and Mr. CHECKLEY discussed the subject at considerable length. Mr. RANDALL, of Coalbrookdale, gave a very interesting *resume* of his inspections and explorations along the eastern boundary fault of the Shropshire coal field. He thought that there was clear evidence of part of that coal field being terminated by denudation, for the lower coal of that field extended for nearly a mile further east than the uppermost coal, and so in proportion with the intermediate coals. This, he said, was what had been called the Simon fault, and not a clean cut downthrow fault, like the one they had seen that day. He had, however, great hopes that coal would be found in patches, and wholly in the northern portion of the unexplored region. Mr. RANDALL'S remarks were listened to with considerable interest. Prof. BECKETT was then asked for his opinion. Probably because he did not agree with the opinions generally expressed, Prof. BECKETT said that he thought it was a waste of time to discuss the matter. This sentiment was by no means shared in by any of the other visitors. Votes of thanks to the entertainers were passed, and the company separated.

MANUFACTURE AND APPLICATION OF EXPLOSIVE COMPOUNDS.

The washing process adopted in the manufacture of gun-cotton and other forms of pyroxyline, which occupies much time and attention, requiring a large and continuous supply of cold running water, and which is carried on for several days at considerable expense, is, it is claimed by the invention of Mr. G. CLARK, of Northumberland-street, Strand, entirely obviated and rendered unnecessary, and a part of the excess of acids adhering to the pyroxyline, after it is withdrawn from the acid and drench baths, instead of being wasted by being washed away with the water in the washing process, is turned to account to improve the properties of the pyroxyline as an explosive compound. To effect these objects, after the pyroxyline has been withdrawn from the acid bath, and drenched with sufficient water to prevent its oxidisation, he allows part of the diluted acids to drain off in a strainer, leaving the compound in a moist state. He then adds to and mixes with the compound, by frequent stirring and agitation, carbonate or bi-carbonate or chlorate or chromate of potash—that is, one only or more than one of those substances, the quantity of one or the other or any of them so added and mixed being proportioned to the quantity of diluted acids adhering to the pyroxyline in its aforesaid moist state. The rule to regulate the said proportions is the chemical equivalent of the potash contained in the carbonate, bi-carbonate, chlorate, or chromate of potash mixed in the pyroxyline as aforesaid to the nitric acid adhering thereunto in excess, so as to produce by chemical conversion resulting from affinity nitrate of potash intimately combined with the pyroxyline without any or with little excess of any of the compounds of potash mentioned. The effect of this chemical action is to neutralise the acids in excess, and render washing in water (of which the object is to separate such excess of acids from the pyroxyline) unnecessary. At the same time, this process improves the properties of the pyroxyline so treated as an explosive compound by rendering it less sensitive to atmospheric influence, and more uniform in strength throughout the mass.

In the application of the blasting material obtained by this means, Mr. Clark has designed an improvement for regulating and fixing the charges, in the shape of condensed pellets for small arms, ordnance, or blasting. He forms a box or case of the proper size and form to contain the charge, and fit into the cartridge case of a breech-loading or the chamber of a muzzle-loading gun, or into the blasting-hole intended to receive the charge; such box or case may be made of metal, paper, or cloth, or other suitable material. Inside this box or case he introduces and forms into a pellet a determined charge of the explosive compound with the required degree of compression, and he then closes and hermetically seals the case, leaving at one end a small orifice, to be placed over or under a fulminating-cap or patch for ignition. Either the materials with which the pellet cases are formed and closed are impervious to water, or he makes them so by covering the pellet case when loaded with India-rubber or other waterproof varnish or coating. The pellet in its case is inserted and rammed in the cartridge, gun, or blasting hole, into which it is made to fit, and thus there is no difficulty or danger in loading, and uniformity of charge and explosive effect is ensured, but the pellet case he prefers under this improvement is made of copper, brass, or steel, or other metal; being hermetically sealed it is water-tight, and by closely confining the explosive material adds to its propulsive force.

The improvement forming the third part of his invention refers to the use of glycerine oil in combination with other substances for explosive purposes in a way not hitherto practised. It has been proposed to combine nitro-glycerine with porous materials in a comminuted state, and also with gun-cotton and gun-wood, but it is to be apprehended that the dangerous properties of that highly-explosive compound (nitro-glycerine) and its liability to decomposition, which is a source of danger, will not be entirely remedied by any admixture with other materials. The principle of the improvement is to make use of glycerine oil as an adjunct to pyroxyline in manufacturing the latter by treating the former with nitric and sulphuric acids, not alone, but in combination and mixed with vegetable fibre. The method by which he proposes to proceed is to mix glycerine oil with textile or other vegetable fibre in a fibrous or comminuted state (that is, in small grains or particles) in sufficient quantity to impregnate the said substances so used uniformly with the oil to the extent they will absorb the oil without excess, and then to treat the mixture with nitric and sulphuric acids in the way usually employed for the manufacture of gun-cotton. By this process instead of combining nitro-glycerine with pyroxyline, as already practised or proposed, he produces glycero-pyroxyline, which is a a different compound from that obtained by mixing nitro-glycerine with gun-cotton or any other form of pyroxyline.

In making experimental trials of the manufacture and use of the explosive compound, which forms the object of his invention (and which he terms pyro-pulver), for the purpose of perfecting the manufacturing processes thereof, he has ascertained in using sawdust as the form of vegetable fibre to be treated in the manner described, that for the production of a heavy granulated explosive by means of the invention it is advantageous by sifting to separate from sawdust as it comes from the mill the larger grains or particles of wood, and to submit the grains or particles so separated to the processes of the invention, whereby he obtains granulated pyro-pulver sufficiently heavy to run freely from a flask, like black gunpowder; and he, therefore, claims as part of his invention the production of the compound he calls pyro-pulver in grains of sufficient weight to run freely from a flask by separating from sawdust the heavier particles of wood, and treating the same by the process herein before described.

*** With this week's Journal a SUPPLEMENTAL SHEET is given, which contains—Messrs. Jones and Bidder's Invention for Prevention of Colliery Explosions: Gunpowder and Blasting Superseded (*illustrated*)—The Working and Ventilation of Coal Mines—Mining in Devon and Cornwall: the New Stannaries Act—Prof. Smyth's Lectures at the Royal School of Mines—The Midland Institute of Mining Engineers—South Midland Institute of Mining, Civil, and Mechanical Engineers—South Staffordshire Institute of Mining Engineers—Boiler Explosions: Anti-Incrustation Compositions—Accidents in Coal Mines—Practical Engineering: Oblique Arches—Bourne's Recent Improvements in the Steam-Engine—Artificial Fuel—Homfray's Manufacture of Coke—Foreign Mining and Metallurgy, &c.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JULY 9, 1869.

COPPER.	£ s. d.	£ s. d.
Best selected..p. ton	76 0 0–	—
Tough cake and tile	74 0 0–	—
Sheathing & sheets.	78 0 0–	80 0 0
Bolts	78 0 0–	—
Bottoms	81 0 0–	83 0 0
Old (Exchange)....	65 0 0–	—
Burra Burra	78 0 0–	—
Wire.....per lb.	0 1 0	– 0 1 0½
Tubes	0 0 11¼	– 1 0

BRASS.	Per lb.
Sheets .....per lb.	9d.– —
Wire ..... „	8½d.-8¾d.
Tubes ..... „	10½d.-11½d.
Yellow Metal Sheath.p. lb.	7d.- —
Sheets ..... „	6½d.-6¾d.

SPELTER.	Per ton.
Foreign on the spot	£21 0 0– —
„ to arrive..	21 10 0– —

ZINC.	
In sheets	£26 0 0-26 10 0

TIN.	
English blocks	123 0 0
Do., bars (in barrels)	124 0 0
Do., refined	131 0 0
Banca	135 0 0
Straits	130 0 0

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 8 0– 1 10 0
IX Ditto, 1st quality	1 14 0– 1 16 0
IC Ditto, 2d quality..	1 6 0– 1 8 0
IX Ditto, 2d quality..	1 12 0– 1 14 0
IC Coke	1 2 6– 1 4 0
IX Ditto	1 8 6– 1 10 0
Canada plates, p. ton..	13 10 0– —
Ditto, at works	12 10 0– —

IRON.	Per ton.
Bars Welsh, in London	6 15 0– —
Ditto, to arrive	6 15 0– —
Nail rods	7 2 6– 7 5 0
„ Staffd. in London	7 10 0– 8 0 0
Bars ditto	7 7 6– 8 0 0
Hoops ditto	8 0 0– 9 15 0
Sheets, single	9 0 0–11 0 0
Pig No. 1, in Wales ..	3 15 0– 4 5 0
Refined metal, ditto..	4 0 0– 5 0 0
Bars, common ditto..	6 0 0– 6 5 0
Do. mrch. Tyneor Tees	6 10 0– —
Do., railway, in Wales	7 5 0– 7 10 0
Do., Swed. in London.	9 17 6–10 0 0
To arrive	10 0 0– —
Pig, No. 1, in Clyde..	2 11 6– 2 18 6
Do. f.o.b. Tyne or Tees	2 9 6– —
Do. Nos. 3, 4, f.o.b. do.	2 6 6– 2 7 0
Railway chairs	5 10 0– 5 15 0
„ spikes	11 0 0–12 0 0
Indian Charcoal Pigs, in London, p. ton..	6 0 0– 6 10 0

STEEL.	Per ton.
Swed., in kegs (rolled)..	— – —
„ (hammered)..	14 15 0–15 5 0
Ditto, in faggots	15 15 0–16 0 0
English, spring	19 0 0–23 0 0
QUICKSILVER (p. bottle)	6 17 0– —

LEAD.	Per ton.
English Pig, com.....	19 0 0– —
Ditto, LB.....	19 10 0– —
Ditto, WB	20 10 0– —
Ditto, sheet.....	19 15 0– —
Ditto, red lead	20 0 0-20 10 0
Ditto, white	27 0 0-30 0 0
Ditto, patent shot....	22 10 0– —
Spanish.....	18 10 0– —

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—A rather better feeling has been manifested in the Metal Market during the past week, and business has assumed a more encouraging appearance, and although the number of transactions has not been very large, yet there has been a decided increase, while the prospect for the future is more favourable. We are still without orders from India to any extent, although the intelligence from thence is by no means unsatisfactory; we, therefore, hope that we shall soon see an improvement taking place, and that orders will begin to arrive in good numbers. The continued ease of the Money Market, with the prospect of a further reduction in the Bank rate of interest taking place ere long, should have the effect of encouraging transactions, and doubtless it will do this eventually; and as soon as an improved demand springs up this condition of monetary affairs will be sure to have its full weight in promoting an increase in business. For the present there is very little speculative movement in the market, and unless something should arise to cause a stir in some of those metals which are generally chosen for speculative operations, we shall remain without any of those aids to liveliness which, although of a transcient character, have the effect of producing a spurt in the market, which causes considerable activity for a time, and often leads to a large amount of business being done. Prices without having materially altered during the week have in some instances manifested a greater degree of firmness, which will result in advances taking place as soon as more activity is shown in the trade. The present month is one in which in former years a good business was generally done in metals, and we trust that before the month has closed it will be found that a considerable improvement has taken place in the condition of the market.

COPPER.—A telegram received from Valparaiso, dated June 3, states that the charters for copper in the last half of May were 1400 tons, and the consequence has been that the market has become rather firmer, and sellers are not disposed to make any concessions in prices. Ore is quoted at 13s. 9d. per unit, and Chili bar 68*l.*

IRON.—In Staffordshire the Quarterly Meetings of Ironmasters have been held during the week—at Wolverhampton on Wednesday, and at Birmingham on Thursday. The attendance at both places was large, and the trade was well represented. Buyers, however, were but few in number, and those present appeared more desirous of ascertaining upon what terms contracts could be made than of entering into actual engagements. The general tone of the meetings was, however, more cheerful, and the impression appeared to be that there was a prospect of future improvement in the trade. In anticipation of quarter-day orders have been sent to several of the principal makers, and the second-class firms are moderately well engaged, and, judging by the tone of the meetings, they are not desious of obtaining an accession of orders at quite such low prices as they would have accepted three months ago. In Welsh the position of the trade keeps tolerably steady, the works being in regular employ, and there is every prospect of their continuing so. The exports on account of the Russian and American markets are still large, and from the other foreign markets there is about the average demand. In the rail department prospects are considered favourable, and the contracts already received will keep the works going for some months to come. Prices are firm, and when shorth delivery is required makers will not book engagements except at advanced rates. In Swedish iron the demand is very good, and considerable sales have taken place. In Scotch pig-iron there has been a moderate amount of business done during the week. The last price received from Glasgow was 50s. 8d. cash.

LEAD.—A very good business has been done in pig during the week, and prices show a tendency to become firmer.

TIN.—The market has remained quiet during the week, and transactions in Straits have been very limited, still holders are firm at 130*l.* cash, under which business cannot be done.

SPELTER continues still without evincing any degree of activity; prices are, however, firm at 21*l.* for parcels on the spot.

TIN-PLATES.—At the Quarterly Meetings of the trade representations as to the present position of the trade were very unsatisfactory, the relative price of tin-plates, as compared with that of the raw article, being lower than hardly ever known before; and though the export has considerably increased, many of the works have not been more than half employed, which indicates that the multiplication of new works has been far too rapid in proportion to the increase in the demand. It was, therefore, resolved that as the ruling prices are still unremunerative, the meeting recommends that the reduction of make shall continue until such time as prices improve.

STEEL and QUICKSILVER in moderate request only.

THE IRON TRADE—(Griffiths' Weekly Report).—The Birmingham Quarterly Meeting was held in the Town Hall, on Thursday last, and passed without any incident requiring especial remark. The meeting was not larger than usual at this season of the year; and although the tone of the meeting was satisfactory, there was no disposition on the part of buyers to secure large parcels of common Staffordshire bars for forward delivery, in prospect of higher prices. Some good orders were placed with "Bloomfield." The "Noble Earl" and the well known "S. C. Crown" brand was, as usual, in good request at this meeting. The most favourable feature here was the large business done in pig-iron. The Lilleshall Company sold upwards of 13,000 tons of their famous Shropshire iron, a very large portion of this being for Staffordshire delivery. One of the Northern hematite firms likewise placed some large parcels of pig-iron here. Our market has been quiet during the week, with very little actual business doing, scarcely any new enquiries for iron having turned up. The nail market continues firm, and the prospects of this branch of the trade encouraging. A further reduction of the Bank rate of discount was expected this week, but the inaction of the Court of Directors in this respect has had no effect on values o any kind, the probability being still in favour of a further reduction in the rate We have no improvement to report in the market here for tin plates.—75, Old Broad-street, London, July 9.

THE COPPER TRADE.—Messrs. Vivian, Younger, and Bond—Last Friday, after our report was written, a better feeling was manifested for copper, and has continued throughout the week. Prices are, however, not much higher, although somewhat more in favour of sellers. A tolerably good business has been done in all sorts of copper, the greater part being for speculation. In ores several cargoes of Chilian, and one of Cape, were done at 13s. 9d. Yesterday we closed firm. English manufactured can only be quoted nominally.

Messrs. James and Shakspeare—The charters from Chili for the last fortnight in May were advised by telegram on the morning of the 2d inst. as 950 tons in bars and ingots, and 450 tons in ores and regulus. This being a comparatively moderate quantity imparted some animation to the market, and although smelters do not generally seem inclined to pay above 13s. 6d. for furnace material on the spot, yet for distant arrival a cargo of regulus is reported at 13s. 9d. per unit, and about 1100 tons, of ore on spot, and of high per centages at same figure. In bars there has been a very fair business done at 67*l.* 10s. to 68*l.* cash, irrespective of brand, and 69*l.* to 69*l.* 15s., with extended prompts, the quantities sold amounting to about 900 tons; but as a large portion of the stock is in second hands and held in London, it is difficult to give particulars with precision; in fact for some time past the chief transactions have been done in this city. Ingots of the Urmeneta brands have sold at 74*l.* delivered in Birmingham, and 72*l.* has been refused for Lota in warehouse, with customary conditions. In Australian a large quantity of Wallaroo was sold on terms which have not transpired. English is in fair demand, and 78*l.* paid for several parcels of manufactured for shipment to Bombay and Calcutta; at a reduction of 1*l.* to 2*l.* per ton from said price there are large orders in the market which cannot be executed. There is also more enquiry for sheets and bottoms for the Levant, and this demand, which some years ago was an important element in the trade, seems to be on the point of reviving.

CHEMICALS AND MINERALS—J. Berger Spence and Co.'s Report.—Chemicals: During the last few days a slight re-action in the home trade has taken place, chiefly owing to the stocks having been low, and consumers deferring their orders until the turn of the half-year. For foreign demand an average business.—Soda: Soda ash, limited sales at 7*l.* to 7*l.* 5s. per ton for 48 per cent. Salt cake, 2*l.* 17s. 6d. Caustic soda, not much doing, at 13s. 3d. to 13s. 9d. Crystals, 4*l.* 5s.—Nitrate of Soda: Very firm, at 14s. 6d., with an upward tendency.—Potash: Muriate remains at 2*l.* 17s. 6d. for 80 per cent.—Saltpetre: Bengal, at 21s. to 22s. Refined, 27s. 6d. No business doing.—Alum: An average trade for home and foreign, at 7*l.* to 7*l.* 2s. 6d., in barrels. Loose lump, 6*l.* 5s. Ground, 7*l.* 5s.—Ammonia: Sulphate is firm, at 16s. to 16s. 6d.—Copperas: Dull, at 51s. Rusty, 52s. Dry, 45s.—Pyrites: In fair demand, at 8d. per unit; and copper pyrites, at 7½d. per unit.—Lime: Phosphate at 52s. 6d. for 65 per cent. Bleaching Powder, 8*l.* 15s. to 9*l.*—Manganese: For 40 per cent., 40s; and for 70 per cent., 100s.—Ellesmere Chambers, King-street, Manchester, July 8.

The MINING SHARE MARKET continues dull and depressed, and prices with few exceptions are merely nominal. The transactions recorded have been in West Chiverton, Chiverton Moor, Wheal Chiverton, Grenville, Wheal Buller, Van Consols, East Lovell, New Lovell, West Frances, East Grenville, East Caradon, Chontales, Frontino and Bolivia, Don Pedro del Rey, Prince of Wales, Tincroft, and one or two other mines.

There was no sale of copper ores this week, and will not be again till the 22d inst. The statistics published in the *Mining Journal* last week show a great falling off in the sales both of Cornish and foreign ores, and the miner may well seek in vain for a reasonable cause for the continued low standard. During the quarter ending June 30 the copper ores sold in Cornwall realised the sum of 99,573*l.* 13s., against 141,281*l.* 0s. 6d. in the corresponding quarter of last year. At Swansea the sales of foreign ores realised the sum of 95,208*l.* 3s., against 140,023*l.* 10s. 6d. in the corresponding quarter of last year, making a total reduction in the quarter, as against the June quarter of last year, of 87,522*l.* 15s. Anglo-Brazilian Gold are quoted, 10s. to 12s.; Chiverton Moor, 2¾ to 3; Chontales Gold, 25s. to 30s.; Cook's Kitchen, 13 to 14; Drakewalls, 15s. to 17s.; East Caradon, 6½ to 7; East Lovell have advanced to 14½ to 15; Frank Mills, 3¾ to 4½; Frontino and Bolivia, 24s. to 26s.; Great Laxey, 17½ to 18¼.

Prince of Wales, 24s. to 26s.; the 65 west has got through the western part of the cross-course, and, as far as seen, is worth 20*l.* per fathom. In explanation of the report of last week, when the lode was said to be *again* in the cross-course, after having been previously reported as through it, and worth 20*l.* per fm., and which had an adverse influence on the shares, we understand in the 30, where this cross-course was first seen, it was all in one; in the 45 fathom level, it split into two parts, with 4 feet of good lode between, and a rich course of ore beyond them. In the 55 it was in one part only, but but in the 65 it is again in two parts, with 6 ft. of good lode between them; and, as the lode has now got through the second part, worth 20*l.* per fathom, the agent looks for an improved course of ore. Great North Laxey, 21s. to 23s.; Great Wheal Vor, 13¼ to 14; Herodsfoot, 42 to 44; Marke Valley, 8¼ to 8½; Mineral Bottom, 2¼ to 2¾; New Lovell, 34s. to 36s.; North Crofty, 15s. to 17s.; North North Treskerby, 11s. to 13s.; Providence Mines, 33 to 35; Rosewall Hill and Ransom, 25s. to 30s.; Tincroft, 15½ to 16¼; West Chiverton, 47½ to 49; West Frances, 50 to 52. East Wheal Seton, 18s. to 21s.; at the meeting the accounts showed 1077*l.* 6s. 4d. against the company, and a call of 3s. per share was made. The eastern shaft has been sunk to a depth of 17 fms. under adit (or 35 fms. from surface), and in the 20 a cross-cut will be driven to the junction of Harvey's and Simmons' lodes, of Wheal Seton. West Seton, 175 to 185; Wheal Buller, 11 to 13; Wheal Chiverton, 3¼ to 3½; Wheal Grenville, 47s. to 49s.; Wheal Kitty (Lelant), 6 to 7; Wheal Kitty (St. Agnes), 4¾ to 5; Wheal Mary Ann, 14½ to 15. Don Pedro del Reys declined more than 10s. per share a few days ago, but have recovered, and leave off 4¼ to 4½. It would appear from the circular issued by the directors that interested parties had been addressing letters to the shareholders with a view of inducing them to sell—a very common practice indeed in regard to mining companies—but the explanation of the board seems to have put matters right again. The produce and profit from January to May last is 110,102 oits. of gold; profit, 32,200*l.*; and it is expected that the Californian pumps will keep the mine dry until the horse-engine, ordered some time ago, has been erected. East Grenville, 4 to 4½; the lode in the 120 east has improved, and is worth nearly 1 ton per fm. The 45 east is worth 2½ tons per fathom. Wheal Uny, 3½ to 3¾; Van, 36½ to 37½; Van Consols, 2½ to 3; South Condurrow, 25s. to 30s.

The mineral resources of Turkey have long been known as of surpassing richness, but, for reasons which we need not enter into here, they have never been properly developed or worked. The Turkish bondholders, therefore, will read with pleasure an advertisement in this day's Journal headed "*Imperial Ottoman Mining Company (Limited)*, being the first concession to foreigners of a large tract of rich mineral ground. Indeed, from the reports of Capt. Thomas Richards, of Redruth, who inspected the property in 1866, and of Capt. Pope, formerly of Wheal Basset, and of Capt. John Vivian, whose reports are dated June 9 last, the mine seems to have prospects beyond any other in England, not excepting even the Great Van itself. Capt. Richards estimates that from the back of the 10 fm. level 200 tons per month of rich silver-lead ore could be broken by 30 men, and if the ore holds down, which there is no reason to doubt, the returns could be increased to 1000 tons per month, which, at the small estimated profit of 5*l.* per ton, would give 60,000*l.* a year. Capt. James Pope, whose report is dated last month, says the shaft has been sunk 3 fms. below the 10, where the lode has improved in quality and appearance, and worth 12 tons of silver-lead ore per fathom; and he adds—"I have no hesitation in saying, provided the lode proves as productive in the 20, 30, and 40 fm. levels (*and I have not the slightest doubt it will be found much more valuable*) there would be no difficulty in increasing the returns to 600 tons or 800 tons, or even a *larger quantity*, per month." Capt. John Vivian values the lode 15 fathoms deep at from 12 tons to 14 tons per fathom, and considers there would not be any difficulty in realising from 700 to 1000 tons per month, should the lode continue rich to the 40. The cost of getting the ores to the port of shipment will not exceed, it is said, 10s. per ton, and they can be shipped at all seasons of the year. Looking at the reports of these practical agents, it would really seem that the mines now offered to the public only require to be properly developed and worked to be made the most productive mines of the day; and it is to be hoped that the directors, among whom we recognise two highly respectable members of the Stock Exchange, will see that the management and practical working of them shall be placed in good and proper hands. The concession from the Sultan is for 99 years, from June 9 last, at a royalty of 2 per cent.

The Market for Mine Shares on the Stock Exchange during the week has been very quiet. There has been some material fluctuations

in United Mexican, Don Pedro, St. John del Rey, &c., but at the close the market assumed a more settled aspect. Van shares are in demand, owing to the continued improvement in the mine; the lode in the 30, or bottom level, is opening up even better than was expected. Driving has been commenced both east and west in a lode unparalleled for richness, and all other points of operation are unchanged. Price of shares, 37 to 38. West Chiverton shares are rather firmer at 48 to 49. Great Vors are 13¾ to 14¼. Great Laxeys are flat at 17½ to 18. East Lovell shares have risen to 14, 15. Prince of Wales shares have risen to 24s., 26s. In Foreign Mines, United Mexican shares rose to 3; the sudden rise brought in a few sellers, and a reaction in price, closing 2½ to 2¾. St. John del Reys rose to 18, from which a reaction set in, closing 16¾ to 17¼. Don Pedro shares fell from 4*l.* prem. to 2¾, and subsequently rallied to 3⅜, 3½. Rossa Grande, ⅜ to ½, and are fairly good. Taquaril in fair request at 2s. 6d. to 3s. 6d. prem. General Brazilian, 3s. 6d. to 4s. 6d. prem., and in demand. Port Phillip, 19-16ths to 11-16ths; a few shares offering has rather depressed the market. Chontales shares are flat at 1¼ to 1⅜. Yudanamutana, 1⅜ to 1½; Pestarena, 1⅜ to 1⅝. Frontino shares are in good demand, and maintain the late rise, closing firm at 24s. to 26s. The features of the market otherwise are unimportant.

IRISH MINE SHARE MARKET.—A considerable amount of business was done in mining securities, but prices were particularly unsteady, and leave off in favour of buyers. General Mining Company for Ireland shares, which last week were ineffectually enquired for at 15s., have this week been sold at 10s., at which price they remain firm. In Cape Copper shares nothing was done. Wicklow Copper shares (2*l.* 10s. paid) ranged from 9*l.* 17s. 6d. to 10*l.* 12s. 6d., but leave off on sale at the latter price. Connorree shares have been taken, and are still on offer at 2s. Mining Company of Ireland shares (7*l.* paid) closed, on last Saturday, at 10*l.* 17s. 6d., but after several changes they have declined to 10*l.*, at which, however, they remain firm. The meeting of the Mining Company of Ireland is referred to in another column.

The large field for the profitable employment of English capital to be found in the immense mineral resources of the Turkish Empire has frequently been referred to in the Journal, and the first Anglo-Turkish mining company—the IMPERIAL OTTOMAN MINING COMPANY—has now been established. The object of the enterprise is to work the celebrated silver-lead deposits of Pelidli, between Scutari and Ismidt, in Asiatic Turkey. The mines are within 28 miles of Constantinople, and only eight days' journey from London, so that every facility will be possessed for exercising complete control over the operations at the mines. The capital consists of 100,000*l.*, in shares of 1*l.* each, and the first issue is fixed at 70,000 shares, of which 35,000 only remain for allotment. The shares are to be fully paid on allotment, and share warrants to bearer will be at once issued. The property is within nine miles of the shipping ports of Touzla, Eski-Hissar, and Deridja, where the ores can be shipped at all seasons of the year. The imperial firman, under which the mines are held, has been extended, under the new Turkish mining laws, for 99 years from June 9, 1869. The grant has been acquired by the company for 5000*l.* in cash, and 35,000 fully-paid shares, and confers the right of working for silver, lead, copper, and zinc, at the very small royalty of 2 per cent. on the ores raised. The very important right of felling timber for the use of the mines has been granted, and the grant also embraces an extensive additional area adjoining Pelidli of 6000 denums (420 acres) upon the same favourable terms. The mines have been inspected and favourably reported on by Capts. Thos. Richards, James Pope, John Vivian, and W. Fischbach, who concur in the opinion that it is only necessary to erect the machinery, lay out dressing-floors, and work the mines in an energetic manner, to realise large and permanent profits. The board of direction contains the names of gentlemen of position and influence in the City, and the company is generally considered to be of a character calculated to promote the successful development of the mines, and to inspire in Turkey confidence in English companies. The directors appear to have taken every possible means to ascertain the real merits of the property. Its capabilities may be judged from the fact that it is computed between 200 and 300 tons of high percentage silver-lead ore can be raised and dressed per month from ground already opened, the lode cut into being about 24 ft. wide, carrying ore for the entire width. It is upon these grounds that the practical authorities who have inspected the mine state that in an unusually short period "it will be equal to, if it does not surpass, the best mine in Cornwall."

The PRUSSIAN MINING AND IRON WORKS COMPANY (Preussische Bergwerks und Hutten-Actien-Gesellschaft) has published a prospectus, which will be found in another column of this day's Journal, for the issue of, at 89½ per cent., 180,000*l.* worth of FIVE PER CENT. FIRST MORTGAGE BONDS, authorised by resolution of the general meeting of May, 1868. The bonds are to be paid off at par within a term of 37 years, commencing with 1870, the numbers of the bonds to be paid off each year being determined by lot drawn at the general meeting. The payment of the interest-coupons on July 1 each year, and of the amortized bonds, will be made in Germany in Prussian currency, and in London in pounds sterling, at the fixed exchange of 6¼ thrs. per 1*l.* As an investment these bonds give, it will be found, a return of about 5*l.* 12s. per cent., and the security is unquestionable. The company has two collieries now at work on the Cologne and Minden Railway embracing royalties of 4500 acres, and a third of 3000 acres, in which two shafts are partly sunk; there are also the Vulkan Iron Works (with blast-furnaces, foundry, &c., in full work) near Duisburg, on the Rhine, at the mouth of the Ruhr, with railway communication with all the main lines; and the company have also numerous and extensive iron mines in Rhine Province, Siegerland, Nassau, Hessen, and Hanover. It is explained that the company's four establishments—that is, the Erin, Hansa, and Zollern Collieries, and the Vulkan Iron Works—when brought into full operation will represent a total expenditure, including that of the previous companies, of nearly 5,000,000 thrs., or 750,000*l.*, whilst they will not stand in the books of the present company at much more than half that amount. This fact, and the now tested value of the coal and iron mines, with the production of the iron works, induces the company to expect, on a moderate calculation of profits (which long experience of the Westphalian industry enables the direction with confidence to make and rely upon), a steadily rising dividend, with the development of the mines and works, up to 18 or 20 per cent. on the share capital, after deducting the amount of interest and amortization for these obligations, and the tantiemes and reserve funds required by the statutes.

At Cwm Erfin Mine half-yearly meeting, on Tuesday, a further dividend of 10s. per share was declared.

At Foxdale Mines (Isle of Man) quarterly meeting, on July 3, the directors declared a dividend of 10s. per share, payable on the 13th inst.

At Wheal Kitty (Uny Lelant) meeting, on Tuesday, the accounts for the three monts ending April showed a credit balance of 747*l.* 6s. 9d. The profit on the three months' working was 480*l.* 11s. 7d. A dividend of 512*l.* (10s. per share) was declared, and 235*l.* 6s. 9d. carried to credit of the next account. Captain T. Richards anp Son and W. Rosewarne reported upon the various points of operation. They are prosecuting many points—and tee price of tin being good, they think it the right time to do so. During the low price of tin, circumstances compelled their working narrowly, which, in the last six months, have taken considerable outlay to put the mine in efficient order.

At Pendarves United Mine meeting, on July 1, the accounts showed a profit on the five months of 1307*l.* Deducting the profit now shown (1307*l.*), and the calls paid since last account (1400*l.*), the debit balance is reduced from 9314*l.*, at which it stood in February, to 6606*l.* on Thursday last. The meeting was very largely attended, 234 shares being represented out of 256, leaving only 22 shares unrepresented. Mr. F. W. Dabb was appointed auditor. The bankers' account is overdrawn 7046*l.*

At South Carn Brea Mine meeting, on July 2, the accounts showed a debit balance of 1331*l.* 8s. 3d. A call of 5s. per share was made. Capts. John Daw and John Michell say—"We shall sink the engine-shaft with all speed, as we believe this to be the most important point in the mine. The lode has just got to the depth where it greatly improved in the neighbouring mine, and we believe the next 10 fms. sinking will show good results."

At Wheal Uny quarterly meeting of adventurers, on Monday (Mr. Robert McCallen in the chair), the accounts showed that 64 tons 12 cwts. of black tin had been sold for the quarter, producing 4629*l.* 0s. 7d., against a cost of 3803*l.* 17s. 4d., leaving a profit of 825*l.* 3s. 3d. The balance carried over in favour of the mine was 808*l.* 1s. 5d. The agents value the lode in the shaft at 30*l.* per fathom, the stopes highly productive, and the estimated returns for the coming quarter at 70 tons of black tin.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT an increase in the "notes issued" of 121,035*l.*, which is represented by a corresponding increase in the "coin and bullion," on the other side of the account. In the BANKING DEPARTMENT there is shown an increase in the "other deposits" of 1,941,734*l.*; in the "seven day and other bills" of 23,575*l.*; and in the "rest" of 173,805*l.*: together, 2,139,114*l.*; and a decrease in the "public deposits" of 4,306,513*l.*=2,167,399*l.* On the other side of the account there was an increase in the "Government deposits" of 1,548,626*l.*; and a decrease in the "other deposits" of 3,142,622*l.* =1,593,996*l.*, leaving a decrease in the total reserve of 573,403*l.*

COAL MARKET.—The fresh arrivals this week only numbered 55 ships. The business of the market has been of a quiet character throughout, and prices remain without the slightest variation. Hetton Wallsend, 17s. 6d.; Haswell Wallsend, 17s.; South Hetton Wallsend, 17s.; Tees Wallsend, 17s.; Kelloe Wallsend, 15s. 9d.; Hetton Lyons Wallsend, 15s. 6d. Unsold, 5 cargoes; at sea, 50 ships.

Mr. J. R. Scott, the Registrar of the London Coal Market, has published the following statistics of imports and exports of coal into and from the port and district of London by sea, railway, and canal during June, 1869:—

IMPORTS.

	By Sea. Ships.	Tons.	By Railway and Canal.	Tons cwt.
Newcastle	194	98,078	London and N.-Western	45,058 18
Seaham	50	12,607	Great Northern	57,545 0
Sunderland	120	55,031	Great Western	40,708 0
Middlesborough	14	5,631	Midland	49,887 0
Hartlepool	118	34,308	Great Eastern	22,746 19
Blyth	1	431	South-Western	2,140 11
Scotch	9	2,208	London, Chatham, & Dover.	—
Welsh	8	2,233	London, Tilbury, and Southend	115 0
Yorkshire	19	2,178	South-Eastern	920 4
Small coal	—	227	Grand Junction Canal	419 10
Cinders	11	1,069		
Culm	1	245	Total	219,541 2
Total	545	214,246		
Imports during June, 1868	600	231,750	Imports during June, 1868	204,602 7

COMPARATIVE STATEMENT, 1868 AND 1869.

	By Sea. Ships.	Tons.	By Railway and Canal.	Tons. cwts.
Jan. 1 to June 30, 1868	3529	1,468,139	Jan. 1 to June 30, 1869	1,575,591 14
Jan. 1 to June 30, 1869	3403	1,432,938	Jan. 1 to June 30, 1868	1,407,173 16
Decrease in pres. year	126	35,201	Increase in present year.	168,417 18

DON PEDRO NORTH DEL MINING COMPANY.—A large number of communications have been received relative to the somewhat contradictory advices to hand by the last mail; but their publication is rendered unnecessary by the explanatory statement of the directors (which appears in another column).

LEAD MINING IN WESTERN AUSTRALIA.—We understand Messrs. Elford, Williams, and Co., of Swansea, have lately had consigned to them about 600 tons of lead ore from the Geraldine Mine, in Western Australia, which has realised very satisfactory prices. The ore assays for lead nearly 80 per cent., with a little silver of no value. The reports from this mine are of a most favourable nature, the lode yielding from 1 to 8 tons per fathom.

LEAD MINING IN WALES.—The general meetings of the East Mid-Wales, Mid-Wales, and New Brynpostig Lead Mining Companies have been held during the week upon the respective mines, and the report of the meeting of the first-named company appears in another column. The satisfactory manner in which the Capel Banhaglog—the property of the East Mid-Wales Company—continues to open out elicited the commendations of the large number of influential shareholders who visited the mine. Mr. Job Taylor, Mayor of Dudley (the Chairman of the company), took occasion to congratulate those present upon the unusually favourable indications which their property presented, considering the comparatively limited depth to which the operations have as yet been carried, and stated that its general appearance most favourably compared with the neighbouring property, the now celebrated Van, when that mine was in its infancy. A cordial vote of thanks was passed to Mr. Ross (the London manager) for the opportunity he had afforded the shareholders of visiting the mine in the company of the Chairman and executive, who had imparted so large an amount of interesting and satisfactory information.

GREAT WEST CHIVERTON SILVER-LEAD MINE.—This mine is situated in the manor of Mithian, parish of St. Agnes, Cornwall, and separated from the parish of Peranzabuloe by the valuable stream within the eastern boundary of Great West Chiverton. It comprises five known east and west lodes for a length of about 700 yards, two cross-courses, and a splendid caunter lode. On three lodes adits have been driven for a short distance, which by, further extending, will give backs of about 22 fms. Besides, by sinking the shaft on No. 1 lode 10 fms. deeper, and thence driving the 24 fm. level 50 fms. west, a back of nearly 50 fms. will be attained. When last worked a vugh was cut 14 fms. under adit, which let in so much water that the then adventurers, chiefly working miners, could not keep the mine in fork with their simple horse-whim for pumping power, and funds failing, in consequence of the financial panic, the sett had to be surrendered, although large lumps of silver-lead, worth nearly 20*l.* per ton, are said to have been raised from No. 1 lode, which is 3 ft. wide. The present lessees are now engaged in putting up a trial steam-engine, preparatory to determining on the best spot where to erect a steam-engine of sufficient power to do justice to the highly-promising prospects of this mine, which is not parallel to but *on* the lodes of the celebrated "West Chiverton." The most recent report on the mine was made last summer by Capt. J. Juleff, manager of West Chiverton, who states he has no doubt that from 3000*l.* to 4000*l.*, judiciously expended, would make Great West Chiverton a valuable property.

PROVIDENCE MINES.—These mines comprise the ancient mines of Wheal Providence, Wheal Comfort, Wheal Laity, Wheal Speed, Good Fortune, and other small mines, which were consolidated in 1832; the present workings were then commenced in 112 shares, and Mr. Samuel Higgs, of Penzance, was appointed the purser. The mines having subsequently improved in value, the shares were increased to 560, and afterwards to 1120.

The capital paid in by the original shareholders up to May, 1848, was 10*l.* 6s. 7d. per share, or		£ 11,569	8 1
In addition to which was received for copper ore up to that time		53,940	0 0
,,	tin	34,746	18 4
,,	pitch blende, or the ore of uranium	26	4 4
,,	Sundries	1,937	12 1
Total amount expended before any dividends declared		£102,220	2 10
Copper ore sold since May, 1848	£ 4,302 2 10		
Tin ,, ,,	375,344 19 8		
Sundries ,, ,,	1,245 11 6	= £380,892	14 0
Total receipts		£483,112	16 10
DIVIDENDS PAID from 1848 to June 30, 1869 (half-year), 89*l.* 12 6d. per share, equal to		£100,380	0 0

From the commencement of paying dividends up to November, 1859, about one-third of the produce was divided as profit among the shareholders, which for so long a period is believed to be without a parallel in tin mining.

Paid for dues on tin and copper ore from commencement of working to March, 1840		£ 1,430	0 5
The dues were given up from March, 1840, to May, 1849.			
Paid for dues on tin since May, 1849	£16,074 17 2		
,, copper ,,	239 11 4	= 16,314	8 6
Total amount paid for dues		£17,744	8 11

In May, 1846, that portion of the sett called Wheal Providence, from which the copper was principally raised and sold up to that time, amounting to the sum of 51,775*l.* 15s. 5d., failed, and was abandoned. The success of this adventure may be mainly attributed to the judicious policy of the lords—Mr. Praed, the Basset family, Mr. Stephens, and Mr. Gilbert—in giving up the dues for a time, which enabled the adventurers to prosecute the concern, and bring it to its profitable state.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
July 2	Minera	100	£12 11 6	Walker, Parker, &
—	ditto	100	12 11 6	ditto
—	ditto	50	12 11 6	ditto
—	ditto	100	12 11 6	ditto
—	ditto	70	12 11 6	ditto
—	ditto	50	12 15 6	ditto
—	Great North Laxey	40	13 5 0	Burry Port Company.
5	Dyliffe	51	12 2 6	Walker, Parker, & Co.
—	ditto	48	12 0 0	ditto
6	Maes-y-Safn	43	12 11 0	Panther Lead Co.
—	ditto	40	12 7 6	ditto
—	ditto	22	12 7 0	Mining Co. of Ireland.
8	Van	133½	13 3 6	ditto
—	ditto	33½	13 3 6	Adam Eyton.
—	ditto	33½	13 3 6	Burry Port Co.
—	Talargoch	57	13 6 0	Walker, Parker, & Co.
—	ditto	77	13 16 6	ditto
—	Holywell Level	60	11 12 6	Adam Eyton.
—	Bryn Gwlog	18	12 12 0	Walker, Parker, & Co.
—	Trelogan	30	12 18 6	Adam Eyton.
—	Deep Level	25	12 8 6	Walker, Parker, & Co.
—	Pennant	10	11 11 0	ditto
—	Wagstaff	23	10 7 6	Adam Eyton.
—	Egiwyseg	6	12 16 0	Walker, Parker, & Co.
—	Mold	15	12 0 6	Adam Eyton.
—	Glan Alun	6	11 15 6	Walker, Parker, & Co.
—	Sir Edward	1½	11 18 6	Adam Eyton.
—	ditto	3½	11 0 0	Walker, Parker, & Co.
—	North Henblas	4½	11 3 6	ditto
—	ditto	1¼	5 10 0	ditto

BLENDE.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
July 2	Minera	100	£ 4 2 0	Vivian and Sons.
—	ditto	43	4 2 0	ditto
—	ditto	52	4 4 6	Bagilit and Co.
—	ditto	55	3 3 0	Vivian and Sons.
—	ditto	50	3 15 6	H. Southern.

BLACK TIN.

Date.	Mines.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchasers.
July 2	North Roskear	9 0 0 14	—	£625 18 8	—
3	Pedn-an-drea	6 6 3 4	—	444 16 2	Trethellan.
7	Wheal Kitty	5 6 2 11	£72 17 6	388 8 4	Calenick.
—	Penhalls	7 9 3 8	73 2 6	547 15 8	Carvedras.

COPPER ORES.

NO SALE on Thursday last, or Thursday next.

Copper ores for sale at the Royal Hotel, Truro, on Thursday week—Mines and parcels.—Devon Great Consols 1312—Marke Valley 493—Wheal Crelake 226—East Caradon 194—Bedford United 180—Okel Tor 175—Maria and Fortescue 152—Prince of Wales 109—Kelly Bray 105—Gunnis Lake (Clitters) 95—Wheal Friendship 87—Bolstone 20—Collacombe 14.—Total, 3162 tons.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

THE LUCY PHILLIPS GOLD AND SILVER MINING COMPANY.—Can any of your readers inform me whether it is the fact that Dr. Bishop has been home a fortnight; if so, will he extricate us from our difficulties, as promised by our directors?—WM. AMOR.

MINING IN THE ISLE OF MAN.—We have had a long statement respecting the affairs of the Kirk Michael Mining Company forwarded to us for publication in the Journal. It is to be hoped that so promising an undertaking will not become involved in legal proceedings. Surely any little matter in dispute can be arranged by friends, without calling in the aid of lawyers.

GLAN ALUN.—Can any of your correspondents give any information respecting Glan Alun Mine? How often are its meetings held, and what are its present prospects?—A SHAREHOLDER.

M. B. GARDNER.—We have a letter for this correspondent, and shall be glad to hear where we can forward it.

MINING IN BRAZIL.—The letter from "An Anglo-Brazilian" is hardly suitable for publication. If there should be cause for dissatisfaction in the incompetency, or irregularity in performance of duties, on the part of those officials more especially referred to, then a representation to that effect should be addressed to the directors in London. The mere fact of being relatives should not militate against their employment.

Received,—A Miner—Investor—A Large Shareholder in Taquaril—Reader—A Shareholder—An Explorer—One Interested.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JULY 10, 1869.

THE TIN-PLATE TRADE.

It has been a long time since the tin-plate makers assembled at their Quarterly Meeting under circumstances less satisfactory to the industry which they represented than those which existed when they met in Gloucester last week. Speculation in black tin, by capitalists who were wanting a safe source of employment for their money, has run up the price of that metal nearly 40*l*. above the figure to which it descended towards the close of last year. The advance made certain classes of plates more expensive to produce than at the time it began, to the extent, at one time, of 5*s*. a box; and the condition of affairs is not much improved at the present moment. Buyers will not give the higher price for plates which, considering the difference in the price of tin, the makers ought to get for them, if they are to be sufficiently remunerated. The matter became so serious that there are cases in which makers, unable to get an advance of more than 2*s*. a box, had to sustain a positive loss of 3*s*. on a considerable amount of work which they had in hand. This, of course, they would not do longer than was avoidable. The result was that they forthwith reduced their make to within those dimensions at which plates could be made and sold at a profit. Only the home market could, under these circumstances, be supplied. The manufacturers of tin-plate wares generally in this country had no alternative, if they were to turn out the goods ordered of them, but to give the prices for tin-plates which the firms who would not produce for less than a profit would alone supply them. Fortunately it happened that there has been a fair demand for such wares for some months past. In supplying the bulk of this part of the trade, therefore, and in forwarding a few boxes abroad, the first-class houses have been chiefly occupied in the past six months, with the result that not half time has been worked at their mills throughout that period.

There have been other firms, however, who have not slackened their hands. In fact, they have worked so vigorously that in the past six months they have sent away 200,000 boxes more than they shipped even in the first half of 1868, when prices were very low on the average. This would lead to the inference that the foreign consumers are disposed to give remunerative prices. But that is not so. Our chief foreign customers are those of the United States and of Canada, in which places, as is well known, tin-plates are applied to roofing and other uses to which they are never adopted here. Buyers there are notorious for setting their faces against an advance in the prices of goods obtained from foreign markets, which they have reason to know is the result of speculation. In obedience to that rule, they have all through the prevailing critical time declined to give more than a comparatively trifling advance. Their necessities are increasing, and they are resorting to various devices for supplying them. Old stocks are going out of store with a freedom and at a profit hardly contemplated by the holders. But the necessities of some makers in this kingdom would seem to be more pressing than those of translantic consumers. Hence, although the latter will not give for the goods the prices at which only they can be sold at a profit, yet they are receiving large supplies. The extent of these supplies the above-mentioned comparative figures tolerably well indicate, but a less conspicuous enumeration will place the truth in a still more forcible light. It is within our knowledge that only very recently one Liverpool agency alone sent out as many as 26,000 boxes.

This is going on at a time when the trade officially declares that the ruling price of tin-plates is unremunerative. How long makers will be able to supply customers' wants at a loss will depend upon the time during which tin remains exceptionally high in price, and the demand is not brisk. The date of neither of these states of things is easy to be foretold. Happily for the plate-makers, the tendency in the price of block tin is in the direction of less stringency, the result of accumulating stocks arising out of the very partial operations at first-class mills. But the speculators in the metal are wealthy, and could afford, if they should determine to do so, to hold for much time to come, wishout altering their prices. That they are likely to take this course, however, is hardly probable in the face of the nearing of the date of the next sales. It is possible that when the ensuing arrivals have been placed upon the market these same capitalists may again buy up; but the step is improbable. Still we may be sure that they will not permit themselves to be out-manœuvred. Consequently there is no prospect of a speedy cessation of higher rates than are compatible with a remunerative trade in a time of inactive demand. No one expects that quotations will for a long time to come go down to the point at which they began to dart up after the last sales. As to the date of the other supposed condition, the prospects are even less encouraging. The features by which the American trade is now distinguished are, in our view, even less unsatisfactory than they will be for awhile, a few months hence. The Alabama claim, though in abeyance for the present, must again come up; and it will be revived in such a manner as to increase the reluctance which some American merchants are known to entertain towards an extension of business with this country. Ultimately the question will be adjusted without resort to the terrible alternative of an armed rupture between the two nations, but meanwhile trade will not be brisk between this country and that.

These being the prospects, we are not surprised that it should have been resolved, at the Gloucester meeting, that the reduction of make determined upon at the previous quarterly gathering should be continued. It is not to be stated that the disasters were the result of selling at a loss, nevertheless, it must not be forgotten, as indicating what may yet lie before the trade, that three tin-plate making firms have recently had to succumb.

STANNARIES LAW AMENDMEMT.

That the Cost-book System is better adapted to the working of mines than any other law upon the Statute Book has very frequently been stated, but it has long been felt that since mining operations have come to be carried on by adventurers resident in all parts of the country, instead of by purely local partnerships, some amendments were required to suit the local and customary law to the enlarged and altered circumstances. The recent depressed condition of the Cornish mining interests led to the inconvenience of dealing with out-adventurers receiving fresh attention; and an influential local committee, with the valuable assistance of the members of Parliament for the several districts concerned, of Mr. THOS. CORNISH, of Penzance, and a few others, succeeded in framing a Bill which was admitted by the Legislature to be so just and reasonable that it has now become law. In the Supplement with this day's Journal we publish the Act *in extenso*, which it will be seen provides all the machinery that can be required for enabling mining undertakings to be carried on with energy and success.

The nature of the principal amendments which have been introduced are very generally known, those recognising the power of a majority at a meeting, sanctioning prospective calls, and securing the miners and labourers three months' pay in case of winding-up being the most important. Under the new law, it will be seen that special meetings may be convened after seven clear days' notice, the notice specifying the place, day, and hour of meeting; special resolutions only can be passed there, and must be confirmed at a subsequent meeting, not less than 14 days, or more than a month, after the first special meeting. Special resolutions may alter the rules or custom of mine management. Every four months pursers must enter accounts in cost-book, and show all credits, debts, and liabilities, and the name of every shareholder. Where companies have rules and regulations in their cost-book, these must be filed with the Registrar, or application may be made to the Court to compel the filing—companies without rules continue to be guided by Stannaries custom, as at present. Accounts may be audited at a meeting when special notice is given. The call may be prospective for three months' costs. Calls when passed may be sued for by the purser, and no transfer is to be valid till calls and expenses are paid. Fractional parts of shares are not to be recognised. After due notice shares may be forfeited, and carried to "The Account of Forfeited Shares," to become the property of the company, and disposed of as they may think fit, a statutory declaration by the purser being evidence of forfeiture, and his receipt of the price for it being a sufficient title to such share—all calls, &c., on such share being still recoverable from the original holder. Shares relinquished by notice in writing to the purser to be carried to "The Account of Relinquished Shares," and become the property of the company. Three-fourths of the shareholders can sell a mine. No one is to be liable in winding-up a mine, if he has ceased to be a shareholder for two years before the mine ceased or the winding-up order was made. Miners' wages for a period of three months are to have priority over every other debt of the company. The clause relating to procedure in the Vice-Warden's Court are such as to render the whole subject so clear and intelligible that every mine adventurer may readily make himself acquainted with every detail of the law by which he is to be guided.

The mining laws of Cornwall and Devon are now superior to those of any other part of the kingdom.

THE MINING INTEREST IN MEXICO.

As some extensive mining operations in Mexico are contemplated, it is considered very desirable that the exact position that interest occupies should be understood by English capitalists. This, indeed, is rendered more necessary from the many adverse reports as to the state of the country, circulated by interested parties through the American journals:—

TO WILLIAM NEWBOLD, ESQ., LONDON BANK OF MEXICO, ETC.

DEAR SIR,—As you have lately arrived from the City of Mexico, I shall feel much obliged to you if you would kindly inform me whether the Government of that country is, as has been stated, exerting itself with energy by dictating laws for the special protection of mining interest. An answer will oblige.

June 6. HENRY SEWELL.

London, June 7.—MY DEAR SIR: In reply to your letter of this date, I have much pleasuse in stating that I believe the present state of Mexico to be more favourable to mining than it has been for many years past. The Government is doing all that it can to protect mining speculations, by dictating laws for the special advancement of mining interests. WM. NEWBOLD.

H. Sewell, Esq.

Mr. Wm. Newbold is the manager of the London Bank of Mexico and South America in the City of Mexico; he arrived from Mexico six weeks ago, and, therefore, this evidence is of importance.

THE ROYAL SCHOOL OF MINES, JERMYN STREET.

We this week conclude our sketches of the interesting lectures of Mr. WARINGTON SMYTH "On Mining," delivered at the Royal School of Mines, in Jermyn-street. Our reporter's notes, it will have been observed, indicate the extraordinary range of information—historical, scientific, theoretical, and practical—which the gifted lecturer brings to bear upon the matters he is describing. Our reports have not, because they could not, supersede the advantages students have in listening to the pleasing and animated *viva voce* instruction of the lecturer, illustrated by innumerable sketches and diagrams by which, with a few lines of chalk on a black board, the most difficult technicalities are made plain. They must, however, have shown that, superadded to the practical knowledge gained alone by actual contact with underground operations, such preparation as that obtained at the Royal School of Mines is invaluable. Our last instalment of Mr. SMYTH'S course is published by an appropriate coincidence with the list of distinctions gained by the class-men; and while to those who have achieved distinction the honour is greater, the very scanty dimension of the list shows the reality and closeness of the examinations by which a place in it is attained. That list, however, ought to be ten times as long, and it behoves those who have charge of this important national institution to look well that no fault of theirs limits in any way the use made of the funds so liberally provided by Parliament. There are, as in one of his lectures Mr. SMYTH forcibly pointed out, special reasons in these days why mining should be conducted with greater reference to scientific and economic excellence. The greater depth at which the subterranean riches of our islands have to be sought furnishes a necessity for the application of every mechanical and engineering advantage. The vast increase of population alone compels so enormous a production of minerals that the only chance of profit in many cases depends upon the use of new inventions, or more powerful explosives, to lessen the cost of labour, or increase the quantity of rock dislodged from its antediluvian resting place. Working at greater depths, and drawing such enormous quantities of mineral, the result of inadequate scientific knowledge, is shown in the greater number of ordinary fatal accidents and extraordinary death-dealing catastrophes. We sincerely trust, therefore, that year by year the number of well-instructed mine managers sent into this important field of national industry from the Jermyn-street School of Mines will increase; and that such lectures as those we have reported will be useful to hundreds, where hitherto only tens have reaped their advantages.

THE EXPORT COAL TRADE.—The exports of coal from the United Kingdom in May presented a considerable decrease as compared with May, 1868, the total shipments for the month being 883,808 tons, against 1,105,696 tons in May, 1868, and 1,115,312 tons in May, 1867, In the five months ending May 31, this year, the aggregate exports were 3,989,221 tons, against 4,215,084 tons in the corresponding period of 1868, and 3,832,012 tons in the corre sponding period of the year 1867. In these totals the exports to France figured for 833,235 tons, 798,065 tons, and 858,327 tons respectively. The exports have increased this year to Russia, the Hanse Towns, France, Spain, and Italy; but they have decreased to Sweden, Denmark, Prussia, Holland, the United States, Brazil, and British India. The value of the coal

exported from the United Kingdom is May was 416,301*l.*, as compared with 546,796*l.* in May, 1868, and 563,654*l.* in May, 1867; and in the five months ending May 31 this year 1,923,250*l.*, as compared with 2,103,445*l.* in the corresponding period of 1868, and 1,985,609*l.* in the corresponding period of 1867.

TEN YEARS' IRON EXPORTS.—Notwithstanding all the outcry which has been raised of late years as to foreign competition, the fact remains established that the exports of iron and steel from the United Kingdom attained a larger total in 1868 than in any former year. In 1859 these exports amounted to 1,465,191 tons; in 1860, to 1,442,045 tons; in 1861, to 1,322,694 tons; in 1862, to 1,501,451 tons; in 1863, to 1,640,949 tons; in 1864, to 1,502,964 tons; in 1865, to 1,617,509 tons; in 1866, to 1,683,390 tons; in 1867, to 1,882,650 tons; and in 1868, to 1,945,246 tons. The value of these exports was as follows year by year during the period under review:—In 1859, 12,314,437*l.*; in 1860, 12,154,997*l.*; in 1861, 10,326,646*l.*; in 1862, 11,365,150*l.*; in 1863, 13,150,936*l.*; in 1864, 13,310,484*l.*; in 1865, 13,471,359*l.*; in 1866, 14,842,417*l.*; in 1867, 15,050,391*l.*; and in 1868, 15,021,907*l.*

MINING, METALS, AND MINERALS—PATENT MATTERS.

BY MICHAEL HENRY,

Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eng.

Mr. A. M. CLARK, of Chancery-lane, has specified a patent relating to a material for the manufacture of tiles for roofing purposes. (Communicated to him by G. M. de Jean, ironfounder, of Boulevard St. Martin, Paris.) This invention consists in the application for roofing purposes of tiles made of ordinary cast-iron, the form and dimensions being varied to suit all purposes, and of a more or less ornamental appearance as desired. In order to preserve the metal from oxidation, its surface is protected with any suitable paint or varnish, or the surface may be enamelled with the same object. The tiles or plates of cast-iron are made of various sizes, not exceeding 3 feet square, and not more than 1-16th inch in thickness, but possessing all the requisite strength. These plates are made of all the various forms now in use, and applied for roofing purposes, on either a wood or metal framing. The weight of a square yard of roofing, composed of cast-iron tiles on this principle, each 1 foot in length, would not exceed 33 lbs. Further, by the use of these tiles the number of rafters now required for roofs may in some cases be reduced one-third, and even one-half.

Mr. EDWARD HOGG, of Gateshead, has obtained a patent for an invention relating to machines for straightening and planishing rolled iron. This invention consists in the use of steel or chilled cast-iron frictional rollers, suited to the shape of iron required to be straightened and planished, such rollers being arranged so as to admit of the iron under operation being passed through them in a straight line, the pair of rollers on the centre of the machine being horizontal, and having a pair of vertical rollers placed one over the other at a suitable distance on each side of the said pair of central rollers. The horizontal central rollers are coupled by toothed wheels, one of which, on the vertical shaft of one of the said rollers, is driven by suitable gearing from the main shaft. The other roller is adjustable, as required, by means of a screw; the top vertical rollers are also adjustible. When the iron is passing through the rollers jets of water are applied round the outer surface thereof whilst hot, until a hard, even, and perfect surface is obtained during the time compression takes place; this is effected by means of a perforated tube on each side of the central rollers, through which tube the iron is passed to and fro until it is duly planished. A reversing motion is adopted, to cause the iron to pass backwards and forwards until the fibres are perfectly closed, and the outer skin planished as required, which will be completed at the same heat as when rolled and cut to lengths from the saws. This reversing motion is effected by means of belt-sheaves connected with the first-motion shaft, where a pair of double engines, with reversing motion or slot links, could be applied.

Among recent applications for patents may be mentioned the following:—W. COWAN, of Aberdeen, locomotive-engines; M. TURNER, of Birmingham, manufacture of metallic and other boxes; R. BROWN, of Glasgow, manufacture of iron, and apparatus therefor; D. HEBSON, of Liverpool, steam-engines; W. E. GEDGE, of the Strand, safety-brake for railway vehicles; R. W. WHITEHEAD, coupling or jointing pipes or tubes; W. FRAZER, of Newcastle-upon-Tyne, preparation of materials for fettling or lining puddling-furnaces, and for other like uses; J. SMITHERS, of Dublin, galvanic batteries; J. JAMES, of Cheltenham, machinery or apparatus for crushing or breaking stones, bones, and other hard substances; J. CLARK, of Paisley, and A. EWING, of Glasgow, feeding steam-boilers or generators, and apparatus or mechanism employed therefor; W. E. NEWTON, of Chancery-lane, manufacture of bar-iron, and machinery for rolling the same into various forms (communicated to him by J. Montgomery, of New York, United States).

LIGHTING MINES WITH GAS.—In improving the method of lighting mines, Messrs. M. WILKIN and J. CLARK, of Paddington, propose to use lamps burning gas, oil, or other illuminating materials, but instead of allowing the lamps to draw the air proper for their combustion from that surrounding them they furnish them with air propelled from a pure source at the bottom or top of the shaft; they convey the air to supply the combustion in air-tight tubes to the interior of the said lamps. They supply a greater quantity of air to said lamps than is necessary for the combustion of the gas, or other illuminating material, and the overplus they cause to blow gently out by escape valves or covers near the top of the said lamps, thereby preventing the entrance of foul air or air which has become mixed with fire-damp. By preference, they glaze the lamps about half their height with glass, the upper half they prefer to make of sheet metal to withstand the heat. They furnish dampers to the lamps, so constructed that when the proper supply and pressure of air is obtained the damper is elevated, but if the supply of air is withheld the damper will descend or collapse, and extinguish the light, or turn off the supply of gas according to the kind of lamps used. The said dampers may be fitted in connection with the escape valve above referred to. When gas lamps are used the gas is produced, and conveyed in pipes in the usual way. The air is propelled through the air-tight tubes, above referred to, by any well-understood method, such as by fans, air-pumps, steam-jet, &c. In lighting the lamps, they propose to use safety-matches, such as those manufactured by Bryant and May. After the match is inserted into the lamp by the escape-valve, above referred to, it is struck, and the lamp is lighted. They furnish the lamps with tubes, into which the lighted match is thrust, and thereby extinguished before it is withdrawn.

IMITATION GOLD.—"Oroide," the new alloy resembling gold, is a French discovery, and consists of pure copper, 100 parts; zinc, or (preferably) tin, 17 parts; magnesia, 6 parts; sal ammoniac, 3-6th parts; quicklime, ⅛th part; tartar of commerce, 9 parts. The copper is first melted, then the magnesia, sal ammoniac, lime, and tartar in powder are added little by little, briskly stirring for about half-an-hour so as to mix thoroughly; after which zinc is thrown on the surface in small grains, stirring it until entirely fused. The crucible is then covered, and the fusion maintained about 35 minutes, when the dross is skimmed off, and the alloy is ready for use. It can be cast, rolled, drawn, stamped, chased, beaten into powder or leaves.

THE CONSUMPTION OF COAL.—If the area of all the coal fields in the world were divided into 100 equal parts, it is estimated that America approximately holds 80, Europe 8, and all other countries 12. Out of the 8 parts in Europe, Great Britain holds 5¼, and out of those 5¼ parts she is at present raising more coal than all other countries in the world, out of the remaining 94¾ parts put together. The consumption of coal among continental nations differs greatly from their output. We have no statistics yet in England for showing, as in France, the purposes for which coal is consumed. This will be one of the enquiries of the Royal Commission. France raises about 12,000,000 tons of coal annually, and consumes 18,000,000. Out of the 6,000,000 tons she imports it is estimated that two-fifths come from Belgium, one-fourth from Germany, and the remainder from England. Out of the aggregate 18,000,000 tons consumed in France, it is estimated that 13,000,000 are used in manufactures and workshops, 2,000,000 for domestic purposes, 2,000,000 for steam transport, and the remainder for mines and quarry purposes. Now, England is raising 105,000,000 tons annually; she exports 10,000,000, and consumes 95,000,000. We cannot tell the particular purposes for which these 95,000,000 are consumed, as is done in France; but by dividing the quantity consumed equally among the population of the two countries, we find the total consumption of coal per head per annum in France is nearly 10 cwts., whilst in the United Kingdom it is upwardss of 63 cwts. for each person. To bring up the consumption of coal in France to the same level as in England would require an additional annual supply of nearly 100,000,000 tons. How enormous, therefore, would be the quantity of coal required to bring up the consumption of Europe approximately to that of England? Every new railway that is constructed, every new steamboat that is built, and every new steam-engine that is erected, all are daily creating so many voracious appetites for the digestion of coal. This too is now going on not merely in Europe, but wherever civilisation is spreading all over the world.

THE NORTH OF ENGLAND IRON AND COAL TRADES.

MIDDLESBOROUGH, JULY 8.—The Quarterly Meeting of the North of England Iron Trade was held in the Royal Exchange, on Tuesday, There was a numerous attendance of representatives from the Northern Counties, as also from Staffordshire, Wales, and Scotland. The meeting lasted for about three hours. There was but a small exhibition of models of machinery or new patents as compared with the show at previous meetings of the trade, but, on the whole, the meeting was regarded as a success. The large and handsome Exchange Hall had a number of tables running down its centre, on which were shown various inventions of interest. Messrs. Robinson and Janson, civil engineers, of Darlington, exhibited a model wire tramway. This invention, now carried to a practical result, has for its object the construction of light and cheap ways for the transport of mineral or agricultural produce in localities as yet unprovided with railways. Though a great number of cases exist in Great Britain to which it may be applied with advantage, the chief development of this method of carriage will probably take place in the colonies, and in other countries, which stand in urgent need of light lines of some kind to lead down their productions to the main arteries of inland communication, or to ports. The system may briefly be defined as a continuous development of the plan now not unusual in India, Australia, and in some mining districts, of brigding over a river or ravine by a single wire-rope, by which, carried in a bucket suspended by a pulley, the necessary loads are transmitted from one point to another. To accomplish the easy passing of the points of support necessary to carry out a continuous line of communication, and to provide for the distribution of the burden and the application of motive power, have been problems of no small difficulty; but, after experiments on a first trial length of ½ mile during the autumn of last year, these practical details were worked out, and a contract was immediately entered into for a line 3 miles in length near Leicester, which has recently been completed, for mineral traffic. This line consists of an endless wire-rope, supported on a series of pulleys carried by substantial posts, which are ordinarily about 150 ft. apart, but, where necessary, much longer spans are taken, in one case amounting to nearly 600 feet. This rope passes at one of its ends round a Fowler's clip-drum, worked by an ordinary portable steam-engine, and the rope is thus driven at a speed of from four to six miles an hour. The boxes in which the stone is carried are hung on to the rope at the loading end, the attachment consisting of a pendant of a peculiar shape, which maintains the load in perfect equilibrium, and at the same time enables it to pass the supporting pulleys with ease. Each of these boxes carries 1 cwt. of stone, and the delivery is at the rate of about 200 boxes, or 10 tons per hour for the three-mile distance. It is almost unnecessary to observe that the proportions of such lines can be varied to any extent to suit the requirements of any particular trade, ranging from 10 tons to 1000 tons per day. In the case of lines for heavy traffic, where a series of loads, necessarily not less than 5 cwts. to 10 cwts. each, must be carried a pair of stationary supporting ropes, with an endless running rope for the motive power, will be employed, but the method of supporting, and the peculiar advantage of crossing almost any nature of country with a goods line without much more engineering work than is necessary for fixing an electric telegraph, without bridges, without embankments, and without masonry, exists equally in both branches of the system.

A working model of Archer's new patent stone-breaker was shown by the Dunston Engine Works Company, Newcastle-on-Tyne. This machine is used for breaking road metal, and for crushing and grinding ores, bones, and other hard substances. The *modus operandi* is thus described:—A slow revolving motion is imparted to the grinding or pulverising roller, and at the same time a short and powerful reciprocating motion is imparted to the lever with the squeezer on its end, thereby operating with a crushing action on the material between the roller and the squeezer as they fall, and are carried round by the turning of the roller. The relative distances of the operating faces from the roller are adjusted as required by varying the thickness of the liner in the connecting link. The periphery of the roller is fluted horizontally, and the faces of the operating lever are fluted vertically. The sizes of these flutes vary according to the material to be operated on, and to the size required to be broken.

A very handsome and interesting model of a power-hammer, worked by a belt, was shown by the patentee, Mr. David Joy, of the Cleveland Engine Works, Middlesborough. The power is applied to a crank, and through a spring. The hammer bar communicates with the cylinder, into which air is admitted at pleasure to cushion the blow.

Mr. W. Asquith, of Broad-street, Halifax, showed a model of a compound slide and screw-cutting lathe, with 10-ft. gap-bed, in full working order.

Plans and sections of Mr. Thos. Whitwell's patent fire-brick stove were prominently exhibited. The patentee assures the trade that his fire-brick stoves possess the following advantages over any other:—They will stand the greatest temperature that can be produced by the combustion of the gases. There is no wear and tear of cast-iron pipes or material. The cost of the patent stoves is not proportionately more per furnace than that of ordinary cast-iron plant equal to modern requirements. Refractory material, such as fire-brick and ganister, is now for the first time made use of in heating the blast, without its being at all necessary to cleanse the gas from the dust carried along with it from the blast-furnace. The use of the red-hot blast effects a saving of several hundred-weights of coke per ton of iron made.

Messrs. G. Hopper and Sons, of the Britannia Iron Works, Fence Houses, exhibited specimens of Segrant's patent railway sleeper—large section—and also of the same description of sleeper for colliery purposes.

There were numerous enquiries for almost all descriptions of finished iron. Forge and angle qualities are a good deal in request. The railmakers continue very busy, and deliveries are being pushed rapidly forward. Shipbuilders have their hands full, and the plate makers are, as a consequence, as busy as ever. The local demand for coal is tolerably good, but orders for coke are very scarce. The practice which is now becoming general of using coal on locomotive engines instead of coke, as formerly, has materially reduced the consumption of the latter. Except for home use, the demand for coal is inactive.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JULY 8.—The general result of the Quarterly Meetings of the South Staffordshire Iron Trade this week has been to confirm what has been previously stated as to the actual position of the trade. There is, probably, rather more iron being made than has been produced in South Staffordshire for some time past, but, in spite of that, it would be rather an over than an under estimate to say the works are able to turn out two-thirds their full make. The production of rails by several firms appears to be an important feature just now, and it is said that one company is rolling 500 tons per week. Some members of the trade are disposed to look with considerable hope on the permanent revival of the rail trade in the South Staffordshire district, and they rest their expectations very much on the superior quality of South Staffordshire rails, which they say is now commending them to purchasers. This hopeful view is, however, by no means universally adopted, some of those who are now making rails asserting that the price makes it almost a doubtful question whether it would not be better to allow the works to stand idle, and so to depreciate. If it should prove that the quality of Staffordshire rails will secure a decided addition to the price paid for the productions of other districts, the sanguine expectations of the first class of persons may be realised to some extent. For sheets the demand is very slack, and the other branches of the trade, except rails, are decidedly quiet. The demand for pig-iron is steady. There is no alteration in price, though in some cases vendors may ask rather more. On the whole, there seem grounds for hoping that the trade will tend to improve as the season advances, though no one anticipates a brisk demand in this district for the present year. The United States trade is very quiet, but accounts speak rather hopefully of the home trade.

There are grounds for believing, as stated in the *Mining Journal* last week, that the ironmasters of South Staffordshire are disposed to adopt modern improvements in the manufacture of iron, in which the younger district on the Tees has taken the lead. Anyone visiting that district must be struck with the far less injury to the atmosphere which results from the iron works there, and this result simply arises from the more complete utilisation of the products of combustion, which, instead of darkening the atmosphere and clogging the buildings of the inhabitants, and destroying vegetation, are turning water into steam, and thus creating the power which is needed—are, in fact, "matter in the right place."

The Hardware Trades of South Staffordshire continue quiet, and accounts are not more cheering generally, though probably there is as much work being turned out as there has been for some months past. The unhappy strike in the nail trade is taking a wider range, and meetings are being held to encourage the men to continue their resistance. It is impossible not to feel that this trade is suffering from the competition of cut nails, and of those of Belgian manufacture. For years it has been drooping, and distress amongst those connected with it has been frequent, and almost chronic. If the nailers possessed more education they would, probably, have been prompted to bring up their children to other branches of industry; but they go on in the old groove, and sink deeper and deeper. The problem of dealing with pauperism and poverty is a very hard one; but every case when probed to the bottom suggests as one of the conditions of amendment the better education of the working classes. The result of this would be at once twofold; they would more readily turn their skill into other directions, and they would have a keener sense of the future, and be thus more powerfully influenced by considerations which observation would force upon their minds, instead of drifting along in the old net.

The Rev. H. Sandford, Government Inspector of Church Schools, who has taken great interest in the education of the children of the working classes in the South Staffordshire district, met the members of the South Staffordshire Institute of Mining Engineers at Dudley, on Monday, for the purpose of eliciting their opinions on the educational clauses in the new Mines Regulation Bill. The discussion which ensued did not point to any definite mode of meeting the difficulty which is now experienced, but Mr. Sandford, and the members who took part in the discussion, appeared quite to agree that the present regulations have an injurious effect; that the masters will not submit to employing boys under regulations as to time and school attendance, and that in consequence they are not allowed to work at all until the age when these regulations no longer apply; and as they are not generally sent to school, the restrictions have the effect of driving them from work to mere play and mischief, if not to criminal habits. The institute appears to be increasing in members, and 17 new ordinary members were elected, eight more proposed, and seven out of the 12 Government Inspectors of Mines elected honorary members.

It is now useless to lament over the fact that two institutions of a similar character exist in South Staffordshire. The South Midland Institute appears to have made a vigorous start, and at present the only course is for both to go on avoiding collision, and good will, no doubt, be done, though, doubtless, some regret that there is not one body instead of two. A meeting of the South Midland Institute was held at Wolverhampton on Tuesday—Mr. S. Bowkley, F.G.S., one of the Vice-Presidents, in the chair. Mr. Randall read a paper "On the Evidence of Denudation in and around the Shropshire Coal Fields," a subject which he has discussed with marked ability in the *Mining Journal*. The paper, which deals in a very interesting manner with the evidence of a great denudation of the coal-bearing strata to the east of the Shropshire field, is fully referred to in the Supplement to this week's Journal. It was agreed, on the suggestion of Mr. Baker, Inspector of Mines, to defer the discussion on the paper to another meeting, when that gentleman said he hoped Mr. Randall would be able to attend. Mr. Randall said he would if possible; and, he added, that he was in hopes that, notwithstanding appearances were so much against them to the south, a better prospect might open up as the result of investigations carried on a little more to the north-east of the Shropshire coal field, rather than to the south-west. Mr. M. Tildesley read a paper on an invention for consuming smoke which his firm—John Harpur and Co., of Willenhall—have patented, and which has previously been described in the *Mining Journal*.

In April last a charge was brought at Tunstall, in North Staffordshire, against Mr. William Simpson, a coalmaster, of having stolen 1000 tons of coal of the value of 200*l.*, the property of Messrs. Joseph and John Alcock. The defendant leased adjoining mines, and it was found, and in the result was not disputed, that he had worked beyond his boundary, and the only question was whether he knew that he was doing so. Mr. Coe, the mining surveyor, called in April, declared that the trespass could not have been the result of a mistake, that the person working the coal must, had he latched and dialled in the usual way, have known that he was getting the coal of the prosecutors. The hearing of the case was resumed before Mr. Davis (stipendiary), Mr. H. Meir, and Mr. L. Wedgwood, at the Police Court, to-day. It was proved that the defendant and his son dialled the pit regularly when the trespass was evidently going on, and also that the workings were close to the boundary in 1865, and were so laid down on a plan made by a surveyor in the defendant's employ, who was called as a witness. Mr. E. Lingard, who had been a lessee of the colliery since Mr. Simpson ceased to be so in 1867, said no coal had since been got in the direction of the trespass, and, on being cross-examined, he gave it as his opinion that Mr. Simpson must have known he was tresspassing, even had he worked without dialling and without a plan. The air-shaft, it was stated, was within 10 yards of the boundary. The magistrates, without calling for the defence, decided that felony had not been proved, and left the prosecutors to their civil remedy.

REPORT FROM SCOTLAND.

JULY 7.—On the day following the date of our last letter our pig-iron market met with what medical men denominate an "alterant," in the shape of diminution of the stocks in store by 1180 tons, when one or two cash buyers appeared, and prices have advanced nearly 6d. per ton from their lowest. This is the first instance this year of iron having been withdrawn from store, and when it is known that there are still 337,000 tons in the same keeping it will be seen that prices can hardly advance much till a further decrease is effected. It is also to be noted that the shipments this week are large when compared with those of last year, the quantity being 15,190 tons, against 10,530 in the corresponding week of 1868—no less than 11,685 tons of the 15,190 tons having been shipped to foreign ports. If cash purchases are continued with skill a panic may seize the market, and prices may be sent up with a bound. The closing prices last week were 50s. 7½d. cash, at which a good business was done; but on Monday only a few parcels changed hands at 50s. 8d. cash, and 50s. 11d. one month, while yesterday 50s. 10d. and 50s. 10½d. cash was obtained, and 51s. one month; but prices were weaker at the close. Market easier to-day, and a limited business done at 50s. 9d. cash and 51s. one month, closing sellers over at both prices; buyers 1d. per ton less. No. 1, g.m.b., 51s. 3d.; No. 3, 50s. 6d.; Coltness and Gartsherrie, 58s.; Summerlee, 56s.; Shotts, 52s. 6d.—all No. 1. Manufactured Iron is steady, and perhaps the larger makers are getting through with their orders more quickly than they are getting them replaced. Second-class makers are well employed, and work with them is abundant. The engine shops have been busier, but they are doing a good stroke of business too, and we are glad to note that the Messrs. Thomson have contracted to supply engines for four steamers for the Ottoman Government, which are being built at Port Glasgow. Ironfounders are quieter, but some branches are busy, especially pipe-making and founders of railway chairs.

Coal for shipment, in which there is a good business passing, is nominally 5s. 9d. to 6s. 6d. a ton, but the offer of a near approach to these prices is not disregarded. Domestic coal can be had at from 9s. to 11s. per 24 cwts. At these prices a full average trade has been done during last week, 34,705 tons having been shipped from the Scotch ports, against 31,985 tons in the corresponding week last year. Our miners continue to meet from week to week, but trade is not considered by them to be in a "flattering" condition, so they did not even "resolve" on doing anything. Mr. Alex. McDonald writes them from London, concerning the Mines Regulation Bill, that "rumour is busy, saying it is to be withdrawn;" and adds, "One thing is certain, the apathy exhibited by those it most concerns in many instances will form a good pretext for such a course."

The Cleland and Mid-Calder section of the Caledonian Railway, which was opened some time ago for goods traffic, was on Friday finally examined by the Government Inspector, preparatory to being opened for passenger traffic. It passes through, and opens up, a pretty large mineral district.

Yesterday we had an opportunity of visiting the Clyde shipbuilding yards, and found from two or three to six or seven vessels on the stocks in each, in different stages of progress. An iron paddle steamer, named the Felis Argentino, has been launched for passenger traffic on the River Plate.

MINERAL LESSEES DENIED THE RIGHT OF USING UNDERGROUND PASSAGES TO WORK COTERMINOUS MINERAL FIELDS.—In the First Division of the Court of Session, on Monday last, an action was tried, in which John G. B. Graham, of Cambuslang, in this neighbourhood, was pursuer, and the defenders were the Duke of Hamilton and his mineral tenants, Colin Dunlop and Co., of Clyde Iron Works. The Duke is superior of the lands of Cambuslang, except a small portion of which is held of the Crown; and in the original feu-grant there was a reservation of coal and minerals. The Duke of Hamilton was proprietor of the coal in the lands of Morristown and Clydesmill, which immediately adjoin the estate of Cambuslang. In working the coal from the lands of Morristown and Clydesmill the tenants of the

Duke used passages below the ground, through the estate of Cambuslang, for the conveyance of the coal to the pit's mouth. The action was for declarator that the defenders had no right to use the lands of Cambuslang, belonging to the pursuer, or to make or use any roads or passages, except for the purpose of carrying coal or limestone won or raised from the pursuer's land, and that the Duke of Hamilton had no right to make or use any roads or passages, whether above or below ground, in or through the lands of Cambuslang, for the purpose of conveying or carrying coal, limestone, or other minerals raised from lands other than the pursuer's; also, for interdict against such use of the roads and passages, and for damages. The Lord Ordinary (Barcaple) assoilzied the defenders, holding that, so long as there were minerals to be wrought, not only all passages, such as drifts and levels, but also all the wastes caused by their removal, continue to be the property of the mineral proprietor. The pursuer reclaimed, and the Court ordered a proof, and afterwards called in the assistance of three judges of the Second Division, and on Monday they, by a majority of five to three, recalled the Lord Ordinary's interlocutor, and granted declarator and interdict as concluded for by the pursuer. The Lord President, Lords Cowan, Benholme, Neaves, and Kinloch held that, when the coal was worked out the right of the feuar became absolute to the whole property, and he had right to use it in any way he chose, and to prevent the superior from making use of any part of his property. When the feu-grant was entered into it could not be in contemplation of the parties that the seams of coal would be used for conveyance. The defenders were using their right of coal in order to assert a right of another kind—the right of passage. They held that, whether the coal was exhausted or not, the defenders were not entitled to use the underground passages for conveying the coal taken from the adjoining lands. Lords Deas and Ardmillian differed, and were of opinion that the interlocutor of the Lord Ordinary was right. They held that the coal of Cambuslang was not exhausted, although it was proved that it could not be worked to a profit. The question was what the defender could make of the coal which was his property. He might use it in any way which did not injure other property. The conveying of the coal through the underground passages did not injure the pursuer's property.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

JULY 8.—The Iron Trade throughout Derbyshire remains without alteration, some of the works doing a quiet trade, and sufficient to keep the hands going, but such can scarcely be said to be the rule, although it may be said the foundries are doing more than those engaged in the production of forged iron. Some descriptions of pipes and castings appear in moderate request at the leading works. The lead mines just now are showing more symptoms of vitality than they have done for a considerable time past; at several of them the water is being cleared out, and the prospects are of a decidedly encouraging character. At Eyam, Middleton, Hucklow, and Tideswell the reports during the past week have been very satisfactory, and there is now every appearance that many of the mines will give very good returns to the speculators, many of whom have been waiting with exemplary patience for the turn of the tide. The demand for house coal is more than usually quiet, there having been a very marked falling off in the quantity going from the district to London. In steam qualities, however, there is a moderate business being done, but there is plenty of room for improvement. In the southern part of the country the trade is still quiet, more especially in the West of England. A good deal of coke is being made for the supply, not only of the local works, but for those in Lincolnshire and Northamptonshire, for which counties a good deal of ironstone is being imported for mixing with the native ore.

Several branches of the Sheffield trades are rather active, foremost amongst which may be mentioned the rolling of heavy armour-plates, for which for some time past the demand has been such as to keep the makers barely going. Railway material has also been in good request, and there is rather more doing in Bessemer, plain and manufactured, and there is every prospect that the great reduction proposed by Mr. Bessemer in the royalty for the manufacture of rails will be the means of very largely increasing the trade in that important article, seeing that in an economical point of view it will in many instances supersede the ordinary iron rail. The works in the South Yorkshire district are going on very favourably, most of them doing sufficient business to keep all their hands well going. At Milton and Elsecar all branches are fully employed, rails in particular being still in very good request. There is no change whatever in the business doing at the principal collieries, nearly all of which are still working short time, and are likely to continue to do so, as there does not appear the least chance of any appreciable change for the better so far as house coal is concerned. In steam qualities there is a moderate trade being done to Grimsby, and rather more than of late with Hull. The battle between capital and labour is still being fought out with vigour, but there are signs which indicate that the struggle is fast reaching the end. At Denaby Main the colliery is working as well as the proprietors could desire in the present state of the trade, so that the 300 men who left some four or five weeks ago are not at all likely ever to be again employed there. At Newton, Chambers, and Co.'s there is very little doing indeed, there not being many men employed, whilst the firm shows no signs of departing from the course they laid down for the future working of their collieries. Strafford Main is standing, so also is Silkstone Fall, the latter owing to the alleged interference of the check-weighman with the working of the colliery, and the support given to him by the men, who have refused to appoint another person in his place, preferring to go on the already over-taxed funds of the Association. At Tinsley and Manor Park there is no change. It is not unlikely that the disputes will be the means of introducing coal-cutting machinery into the district, enquiries concerning which are now being made by several owners.

REPORT FROM MONMOUTH AND SOUTH WALES.

JULY 8.—After the Ironmasters' Quarterly Meetings hopes are entertained that the demand for all descriptions of iron will increase. The orders received during the past week have not been for any large quantities, but there is evidently a better feeling springing up, and a prospect of the trade shortly attaining a more satisfactory position. There are several buyers of rails anxious to make arrangements for further contracts, and the leading makers generally believe that there will be a continuance of orders for rails up to the end of the year. Several steamers have been laden with rails at the local ports during the past week for Russia, and large clearances have been made for the United States, and the improvement which set in in the rail branch at the commencement of the year is steadily progressing, and there is every prospect of the demand still further increasing, as large extensions of the railway system are proposed to be carried out in America, Russia, and several parts of the continent of Europe. Hitherto American and Russian buyers have been extensive purchasers of rails in this district, and there is every probability of their continuing so, at least for some time to come, and as the aspect of political affairs on the Continent is at present satisfactory, and the majority of continental makers have sufficient orders to keep them fairly employed up to the end of the year, it is expected that Austria and other countries will shortly be in the English market for large quantities of railway material. Rails are also being shipped for Peru, and considerable supplies have to be sent to that country during the present season. The home trade has not improved to the extent anticipated, and it is somewhat surprising that with the present easy state of the Money Market business continues at so low an ebb, there being an absence of anything like a speculative feeling in the market. There is an increase in the demand for pig-iron, but there is still room for considerable improvement. The small orders coming to hand for tin-plates are chiefly for coke qualities for exportation.

The Steam Coal Trade has not materially improved its position during the past week, the light and favourable winds for the departure and arrival of vessels at the local ports not having increased the demand to the extent anticipated a few weeks ago. There are, however, a few complaints made of the want of vessels of heavy tonnage, and, on the other hand, a general complaint on the part of proprietors as to the lowness of prices, the keen competition, it is said, preventing any margin being left for a profit. At several of the collieries the output has been greatly reduced, but, notwithstanding this, the hands employed are not working more than half time. The principal clearances being made are for the mail packet stations, French ports, and continental markets, but the exports generally are below the average. There is about an average quantity of house coals being sent to the West of England and Irish houses, but a considerable increase in the demand must take place before the resources of the collieries in the district are called fully into requisition.

Judgment in the case of "Pillar *v.* the Llynvi Coal and Iron Company (Limited)" was delivered in the Court of Common Pleas on Monday. The case was tried at Bristol Assizes, and a verdict given for the plaintiff, who sued the defendants for certain wages of which he had been deprived. Mr. Prideaux, Q.C., obtained a rule for the defendants to enter a nonsuit, and on this the Court delivered judgment. The first question that arose was whether the plaintiff was an artificer under the provisions of the Truck Act, and this the Court decided in the affirmative in the plaintiff's favour. It appeared the defendants had a system of payment by cheques, by which the workmen only got one-fifth of their wages in cash, the rest having to be taken out in goods. This brought the defendants within the Truck Act, which forbids payments by cheques, unless the workmen acquiesced, and as the Court were of opinion that the system was coercive on the workmen, the plaintiff must have his payment in cash. There were also certain deductions for schools and other things, which were illegal, because there was no option on the part of the workmen. The rule was, consequently, discharged. Mr. Prideaux said the system had been discontinued, and he, therefore, would like to submit the case to an arbitrator, to have the amount to be paid settled. The Court said he might take out a summons for that purpose.

The puddlers at Tredegar have been on strike since Friday se'night, owing to a dispute about paying some debts due to the proprietor of the old company's shop. The bulk of them deny their liability, but some have expressed their willingness to pay the amounts claimed by instalments of 10s. a month. Since then we understand the dispute has been arranged.

At the Aberdare Police Court, on Tuesday, Mr. Evans, manager of the Werfa Colliery, was fined 5*l.* and costs, for allowing a boy under 10 years of age to work underground. For the prosecution it was said that defendant had been repeatedly cautioned, and for the defence it was urged that Mr. Jones, the underground agent, had employed the boy, and that Mr. Evans, as soon as he heard of it, got all boys under the prohibited age removed.

A meeting of colliers and others was held at the Temperance Hall, Aberdare, on Tuesday evening, for the purpose of opening a subscription for the relief of the widows and orphans left destitute by the late explosion at Ferndale, and also to take measures to establish a permanent relief fund. Mr. George Wilkinson occupied the chair. The following resolution was unanimously passed —"That this meeting deeply regrets the melancholy explosion at Ferndale, and desires to express its deepest sympathy with the widows and orphans, and others who are left destitute thereby; that a subscription list be at once opened for their relief, upon the distinct understanding that the sum thus contributed form the nucleus of a general permanent fund." A committee was appointed to confer with the local Members of Parliament and colliery proprietors as to the best method of establishing the fund, and also to ascertain whether the Hartley Fund surplus, apportioned to South Wales, could not be made available for the purpose.

The arrivals at Swansea include—the Venus, from Santander, with 140 tons of iron ore, for Richards, Power, and Co.; Bon Pere, from Carloforte, with 160 tons of zinc ore, for Richards, Power, and Co.; Diamond, from St. Nazaire, with 73 tons of iron ore, for Robert Crawshay; Victoria, from Cherbourg, with 98 tons of iron ore, for Robt. Crawshay; Ioren Justitia, from Bilboa, with 100 tons of iron ore, for W. R. Tremellen; Trois Sœurs, from Rotterdam, with 147 tons of pipe-clay, for Forester and Co.; Brenton, from Antwerp, with 150 tons of fire-clay, for Vivian and Son; Santiago, from Santander, with 100 tons of iron ore, for Richards, Power, and Co.; Jose Maria, from Bilboa, with 112 tons of iron ore, for W. H. Tucker; Demosthene, from Carloforte, with 200 tons of zinc ore, to order; Lady Franklin, from Almeria, with 200 tons of copper ore, for M. Bell; George Smith, from Almeria, with 95 tons of calamine and 150 tons of Esparto fibre, for M. Bell; Deutchland, from Sundwall, with timber, to order; Laura, from Carloforte, with 540 tons of zinc ore, for H. Bath and Son; Quince de Junio, from Santander, with 100 tons of iron ore, to order; Robe, from Carloforte, with 405 tons of zinc ore, for H. Bath and Son.

THE TIN-PLATE TRADE.—The quarterly meeting of the trade was held at Gloucester, on Thursday, Mr. Woodruffe, of the Machen Works, Monmouthshire, in the chair. The reports received from the various works as to the present position of the trade were extremely unsatisfactory, the relative price of tin-plates, as compared with that of the raw material, being lower than was hardly ever known before. The exports for the first six months of this year showed an increase over the corresponding period of last year of upwards of 200,000 boxes, but notwithstanding this fact many of the establishments have not been employed more than half time during the last quarter, which goes to prove that the multiplication of new works has been far too rapid in proportion to the increase in the demand. It will be remembered that at the last quarterly meeting a resolution was passed to reduce the make, and on Thursday the makers again resolved, "That as the ruling prices for tin-plates are still unremunerative the meeting recommends that the reduction of make shall continue until such time as prices improve." Tin continues high in price, but the circular headed "Lombard Metal Exchange" did not seem to have much influence on the meeting, and the opinion was general that as stocks are increasing lower quotations will soon follow. The attendance of manufacturers was large, and among the buyers represented were Nash and Co., Liverpool; Johnson, Clapham, and Morris, Manchester; Van Dadelszen and North, London; and Eddington and Co., New York.

THE LINCOLNSHIRE IRON DISTRICT.

Although North Lincolnshire is the most recently-discovered of our ironstone districts, and one in which a very large quantity of ore is now raised, yet for some reason or other it appears to have escaped that notice which has been accorded to localities of considerably less importance. Some seven years ago there was little or none of the stone used, there being no furnaces erected, yet in 1866 the quantity of ore raised was 175,720 tons; and in 1867 it had increased to 192,213 tons, of which 105,625 tons were used in Lincolnshire, and 86,587 tons exported. In 1866 the pig-iron made in the district was 13,765, and in 1867 no less than 25,579 tons. The ironstone fields, which are as yet in their infancy, not being defined, extend for many miles, in some parts coming quite close to the surface, and in others lying at a considerable depth. There are some peculiar features in connection with the stone, which will be found of interest to the geologist as well as to the lover of palæontology, as the stone abounds with fossils.

Frodingham, which is situate midway between Doncaster and Grimsby on the line of railway opened about two years ago, is the *locale* of the furnaces, and the station from which the ironstone is sent into Derbyshire and Yorkshire. It is only distant some four or five miles from Keadby, a sort of inland port, to which the tide comes up, and from which a large business is done in coal from the South Yorkshire coal field to the Humber. In going through the district a day or two ago we were much struck with the peculiar features of the country. After passing Keadby there appeared a vast level plain some miles in extent, a good deal of which was little better than moor land, whilst adjoining it was a large tract of morass, barely covered over with the tide water, with here and there a patch of grass to show that there was some little virtue left in the partially submerged land. Proceeding a little further we arrive at Frodingham station, close to which are the furnaces and works of Mr. CLIFT, known as the Frodingham Iron Company's works.

It may be here stated that most of the stone at present being raised belongs to Mr. R. WINN, M.P. for North Lincolnshire, and it is understood was discovered some nine or ten years ago in exactly the same way as that in the Cleveland district was brought to light. Indeed, it was only a few days since that we were informed by Mr. VAUGHAN (BOLCKOW and VAUGHAN) that about 20 years ago, whilst his father and Mr. MARLEY were out shooting on the Cleveland hills, his father, picking up some stones, expressed his belief that they were ironstone. He put them into his pocket, and then, experimenting upon them, realised the fact which has created the important town of Middlesborough, and made the Cleveland district the "head centre" of the iron trade of the kingdom. So, in North Lincolnshire, we were informed, whilst Mr. WINN and a friend were out shooting there, the latter, on picking up a stone, was struck with its appearance and weight, and at once came to the conclusion that it contained a considerable percentage of iron. The usual tests were applied, and the value of the ore ascertained. So that the land, which before was of little or no value except for shooting, became a valuable property, and which is now rapidly increasing in value. The apparent good fortune of Mr. WINN, however, some time afterwards led him into a long and expensive law suit, which was taken from one law court to another, and has only just been finally decided in the Court of Chancery. It appears that a few years ago the late Earl BEAUCHAMP entered into an agreement with Mr. WINN for the exchange of certain lands and rights in the parish of Brumby, the agreement being based on the theory that the Earl was entitled to "free warren of conies," or, in fact, the right to keep and kill rabbits on the grounds named, Mr. WINN being owner of the soil. It was, however, afterwards considered, on looking over the deeds, that the Earl was entitled to the soil of what was known as the East Common, although it had been previously believed that he had merely the right of "free warren." The origin of the Earl's title was a grant made in 1799 by the Duchy of Cornwall to a Mr. PINDER, one of the Earl's predecessors in the title of "two warrens of conies" called Brumby Warren. The title of Mr. WINN was derived from a grant by the Duchy to Mr. ANGERSTEIN, of "the manor or soke of Kirton-in-Lindsey," in which Brumby was said to be included. The land having increased in value, owing to the ironstone which it contained, the action became a very important one, and turned on the meaning of the word "warren." Judgment was given in favour of Mr. WINN, who is, consequently, the legal owner of the property.

After the discovery of the ironstone, Messrs. W. H. and G. DAWES, of the Milton and Elsecar Iron Works, were amongst the first to avail themselves of the new field for operations, and in 1864 built two furnaces, the place being known as the Trent Iron Works. They have just now completed a third furnace, which will shortly be put in blast. The furnaces are iron-cased, and have all the most recent improvements, the gas being taken from the top for the heating of the boilers. There is a stack 65 ft. high, and the furnaces 48 ft. high. There are two blast-engines of 40-horse power each, six boilers, with a horizontal engine. The ore is raised quite close to the furnaces, and within a foot or so of the surface, and in some places exceeds 20 ft. in thickness. It contains from 30 to 33 per cent. of iron, and both coal and coke in about equal proportions are used in smelting. The drops for the material are at the bottom of the incline of the furnace, and an engine draws up all that is required. The limestone used by the furnaces is brought from Appleby, a distance of about four miles, where it is got quite close to the surface. The firm are just now sinking a shaft at Stanton, about three miles from the works, and have reached the top of the stone at a depth of 110 ft. A good deal of the ore is sent into Yorkshire as well as to Staveley, from which the wagons return loaded with the coal and coke required for the furnaces. The output of pig from the two furnaces is upwards of 40 tons per day. The two furnaces at Frodingham were put up in 1864; they are brick, without casing, and are 60 ft. in height. From one of them the gas is taken off from the top to supply the boiler, the other being an ordinary open one. The foundation for a third furnace has just been put down, and it is expected will shortly be erected. The engine-house is quite a model of what one should be, and is evidently taken the greatest care of. There are two blast engines, each of 50-horse power, of somewhat peculiar construction, and said to be about the only two manufactured on the same principle. They are on COULTHARD'S patent, by which India-rubber balls are introduced instead of valves, and they work remarkably well. There are five boilers, 75 ft. long, and of sufficient power to work engines of twice the capacity of those in use. There is also a horizontal engine for conveying the stone and other material up the incline to the top of the furnaces. The ironstone is worked here as at the Trent Works, nearly from the surface, but not to such a great depth. Nothing but coke is used in the furnaces, most of which comes from South Yorkshire, the firm having a range of some 60 large ovens at Silkstone; but in the present state of the coal trade it appears that it can be bought rather cheaper than it can be produced at Mr. CLIFT'S own place. Another important feature in connection with the smelting is that there is sufficient limestone in the ore as is required, thus saving a good deal of trouble in carting, as well as expense. For the breaking of the slag one of Blake's patent crushers is used, and is found to act very well. The average quantity of pig-iron made is about 45 tons per day.

A short distance from the last-named furnaces is the North Lincolnshire Iron Works. They consist of one large furnace, erected by Mr. ADAMSON, formerly of the Penistone Steel Works. It is 50 ft. high, 21 ft. in the bosh, and 8 ft. in hearth. In the first instance the furnace was built 70 ft. high, with a large bell at the top; but an explosion which took place about two years ago brought down a large portion of the top, and its height has not since been increased. There is a blast-engine of 80-horse power, with five boilers, 60 ft. long and 5 ft. in diameter. The material for the furnace is taken from the bottom by a hoist, for working which a pair of small engines are coupled together. The ironstone got about the works has to be selected with great care, as some of the stone cannot be used owing to the very large quantity of limestone which is in it, in some instances to the extent of fully 40 per cent. As in most of the furnaces now being made, the gas is taken from the top for heating the boilers. The production of iron averages from 30 to 40 tons daily. The Park Gate Company are also engaged in raising ore for their works near to Rotherham, and a good deal also goes to supply the furnaces belonging to the Yorkshire Iron and Coal Company, at Ardsley, near Leeds.

The iron produced from the Lincolnshire ore is soft and pliable, and is in good demand for converting into wire, hoops, and for casting purposes. It is also largely used for mixing with the Yorkshire and Derbyshire stone. The lessor, it may be stated, has built a large number of houses for the men employed at the works; but as the number of them is likely to be very much increased by the opening out of fresh works and the extension of those at present in operation, a good deal of building is going on at the village of Scunthorpe, situate about half a mile from any of the works, so that there will be plenty of accommodation for the workmen. Seeing that there are such vast deposits of stone, miles of it being on the surface, and a great deal at varying depths, there can be no doubt but what the district is destined to become a very important one, as it has all the elements of greatness about it. There is also good railway facilities by way of Doncaster, and the Port of Grimsby is only about an hours' journey from Frodingham.

It is not a little singular that just now there is the same belief expressed in the Lincolnshire iron district that there is in those of Barrow-in-Furness and Northamptonshire—that there is coal to be found at a comparatively moderate depth in the neighbourhood of the ironstone, and that it will be reached ere long. Should such be the case, then, indeed, would the district which we have endeavoured to describe become one of the most important centres of the iron trade in the kingdom, whilst its proximity to the ports of Hull and Grimsby would give it a great advantage over the coal fields of South Yorkshire and Derbyshire, from which not only the greater part of the local but of the shipping trade is now done.

IRON MAKING IN THE CLEVELAND AND STAFFORDSHIRE DISTRICTS.

[A practical correspondent, who has favoured the *Wolverhampton Chronicle* with two previous communications on the above subject, based on what he witnessed in Yorkshire during the recent visit of mining engineers and others from South Staffordshire and East Worcestershire to that part of the country, has sent the following remarks, in continuation of his previous articles.]

I proceed to speak of improvements which we saw in operation in the Cleveland district, and which are worthy of notice in Staffordshire—of course I mean of Staffordshire iron works generally, being well aware that some have been adopted successfully by a few Staffordshire firms, thus further proving their value, and also their applicability to iron manufacture in this county. On entering the Cleveland iron-making district anyone from Staffordshire must be struck with surprise that not a flame is to be seen coming from any of the furnaces, except at intervals for a few moments. This is consequent on their way of utilising the tunnel-head gases. They close the throats of their furnaces by means of two castings, a cap and a cone. The cap, which is rested on the brickwork of the furnace, has no bottom, but the opening is filled by a cone held in its place by machinery so arranged that when the cap is charged it can be lowered, and so permit the materials charged to escape into the furnace. The Cleveland ironmasters, most of them, think that a better distribution of materials is insured by this mode of filling, and that it is an easy and inexpensive way of collecting the tunnel-head gases. We, however, in Staffordshire, who use the gases, do not agree in thinking a close top at all desirable, or attended with a saving of expense in the long run. In the first place, it actually prevents the furnace from being closed by some feet in order to lower the cone, and also it is impossible to know, without going on to the furnace top and feeling with a rod through a hole made for the purpose how far the furnace is from being full, and as nothing tends to regulate the quantity of iron made more than keeping a furnace filled to one exact height, this is an objection. The gases, where the top is closed, are usually blown by force of engine, not only through the materials in the furnace, but into and out of the gas-pipes, of whatever length, size, or shape may happen to be the firing furnaces, flue, and, indeed, the chimney-pots. The back pressure caused by this is very objectionable. We prefer to exert, by means of a good chimney, such an amount of suction beyond all firing places as to draw the gases, or their products of combustion, from the furnace into the mains, and on through firing places and flues by its very suction, thus rather encouraging the furnace to drive, instead of by back pressure, tending to hinder the driving. Another advantage of the open over the close top is that the gas being drawn off is inclined to mix with the air necessary for combustion, whereas in the other case it comes off at a pressure, and, consequently, is not so inclined. From being at a pressure it is liable to leakages, and may accumulate, so causing explosions, whereas, wherever it is drawn through a leak, it will, by the same power, be carried on into the chimney, and so rendered harmless. I am pleased to be able to state that one Yorkshire firm (Messrs. Bagnall, of Grosmont) work our open-topped system, and, in spite of all they hear from Cleveland ironmasters and managers as to the superiority of closed tops, after years of experience in working open ones, having just raised one of their furnaces very considerably, they have again applied our open-top system, which they, a fortnight since, informed me works admirably. The point, however, in which nearly all the Yorkshire furnaces, especially the most improved, differ most widely from ours is in their great height, also in width of bosh. Six years back furnaces were built in Yorkshire very much as they were in Staffordshire, and at that time their yield of fuel varied from 30 to 36 cwts. of coke per ton of iron made. At the present time the heights of furnaces vary from 75 to 105 ft., whilst boshes are of all dimensions, from 16 to 30 ft. Their yields of coke, too, have varied with the increased height of furnace and diameter of bosh to an average varying from 28 cwts. down to 16 cwts., if not lower. These increases to both height and width of bosh have taken place so simultaneously, and the temperature of blast has also been so increased during the same time, that it is very difficult to decide to which of the improvements the better yield of coke is chiefly due. I should have felt very doubtful on this point myself had it not been that Mr. Horton, of Lilleshall, has raised his four cold-blast furnaces at the Lodge 20 ft., without increasing their size of bosh, and thereby saves 7 cwts. of coke to the ton of iron. This height of furnaces I consider to be the most important question for Staffordshire. Are we using (say) 5 cwts. to the ton more coal than we need if only our furnaces were raised a few feet—in other words, where about 35 cwts. of coal are used might we do with 30? If so, at a make of 150 tons of iron per week, and charging the coal as worth 8*s.* per ton delivered into the furnace, the saving would amount to 780*l.* per year per furnace. If we could get rid of coal or coke the quality of resulting iron must be improved, as coal or coke is the great sulphur carrier. There are over-careful ones who are not inclined to look favourably or even hopefully on any improvement that is likely to necessitate a change in their plant as it now stands, and others, from opinions formed, I consider erroneously, say—"But our coal or coke is too weak, and would be crushed by the increase of height of column of measures charged." I answer it has not proved to be so in Shropshire, nor is the cold blast prevented from entering the furnace, though blown at the same pressure, in the same way as before—about 30 lbs. pressure—through the leather bags, and open muzzles usual in cold-blast furnaces, muzzles not even jointed into tuyeres.

I firmly believe that our furnaces and coal or coke will bear increased height, provided they are not made much wider. Indeed, I consider that increase of height does not to any very great extent increase crushing weight, as the materials rest at the bottom on the bosh, which causes those above to carry themselves to a very great extent against the sides. It is well known that if you fill a tube with very fine materials the downward pressure is not anything like equal on the bottom or any other part of them to what would be due to the height of an unsupported column. This is a thing that ought to be settled by positive experiment, as to every coal in the district, on one experimental furnace. We shall certainly work coals that are not now considered worth trying, just as years back no one would consent to work new mine, or as they then called it, stinking coal, in a furnace. I know, though it was before my time, an instance in which 500 or 1000 tons of first-rate new mine coal was offered to be given if it would be worked in the furnaces, so as to prove it a furnace coal. It now works to fully as good a yield as thick coal. Ironmasters in Cleveland, and some other districts also, now use blast of the very highest temperature they can raise, and consider that every increase of heat saves a further very considerable portion of the coal necessary for smelting, besides improving the quality of iron by removing coal, the chief supplier of sulphur. As this heat is raised by the combustion of tunnel-head gas, of course it is done at a very trifling cost. My cautious friend, however, will again say "Yes, but what is the wear and tear on stoves," particularly when I tell him that in one or two instances I have heard it said it does not do to trust to pyrometers; the best way is to make sure of your blast-pipes being red hot. There are, however, several ways of avoiding such fearful wear—by having such a large internal area of stove pipes at work per furnace as shall pass the blast slowly enough to cause it to be heated to the same temperature as the pipes it is passing through. Iron pipes may be safely kept at a dull red-heat, as witness a plumber's iron. A better way still is to use Cowper's or Whitwell's fire-brick stoves. Where it is wanted to keep the blast at such a temperature as shall easily smelt lead or zinc, one of the best ways of proving its temperature is to drill a half or three-quarter inch hole nearly through the cast-iron of muzzle pipes, and put a bit of zinc or lead to boil; in trying, pass a bit of wire through the metal to see if it is in a liquid state.

Another thing of which the Cleveland ironmasters are very careful, and which we have proved the very great value of, is to clothe every bit of hot-blast pipe very carefully with some good non-conductor. The cheapest and best plan of doing this is—Take one part of salt, one of whitening, and two of puff of cinder (to make puff of cinder fill a moulder's hand-ladle with liquid cinder, and then empty the cinder into cold water; it must be crushed afterwards). To the above four parts add a good quantity of cow-hair, and mix up with water to a proder consistency for plastering. For first coat make it so liquid that it can be put on with the whitewash brush, and afterwards lay it on with a trowel as roughly as possible, not more than ¼ in. thick at a time. After three coats wrap it with iron wire, and you can continue this to any thickness you like.

Another most valuable improvement which they invariably use is that of close-running calcining kilns for burning the ironstone. This is doubly valuable to us in Staffordshire, on account of the cost of our ironstone as compared with theirs. Ironstone raw costs them from 3*s.* to 5*s.* 6*d.* per ton, delivered into their kilns; while the expense of ours is from 17*s.* to 18*s.*; kilns also save largely

in fuel and labour, 1 ton of very fine slack being enough to calcine 22 of stone, whilst one man and an engine-boy can calcine all the stone required to make 400 tons per week.

The Yorkshire mode of running the cinders on to the top of wagons is also attended with a large saving of labour.

No doubt there are other things which escaped my eyes, but these are quite enough to show the rapid strides the northern masters have made, and how important it is we should adopt all useful improvements.

COAL MINING IN YORKSHIRE.

The Denaby Main Colliery, situate about one mile from Mexborough and close to the line of railway running from Doncaster to Barnsley, has of late obtained considerable notoriety, owing to the attempt being made to work it on free labour principles. Independent of the attention which it has received from that cause, however, it has some special claim to notice not only as being the nearest colliery to that important formation the magnesian limestone, but as being the deepest pit which has been sunk in Yorkshire to that most valuable bed of coal known as the Barnsley seam. From its great depth, also, it has been proved to be the thickest of any as yet found in the district, a matter of no small importance in so large a field, which as yet has only been very partially developed. Indeed, what is usually termed the Yorkshire coal field should, in fact, be termed the Midland coal field, seeing that its southern extremity commences not far from Nottingham and extends near to Normanton, a distance of something like 70 miles. The coal itself varies in quality in different localities, being most valuable in South Yorkshire, where it varies in depth and thickness considerably, as will be seen from the following figures:—

	Depth.	Thickness.
Wombwell Main	Yards 225	7 ft. 11 in.
Thoybergh Hall	288	7 8
Darfield Main	338	8 0
Lund Hill	214	8 0
Swaithe Main	230	8 6
The Oaks	294	8 8
Mount Osborne	192	9 3
North Gawber	108	9 6
Charlesworth's Swinton	237	8 2
Denaby Main	450	10 2

The coal field, it may be said, dips to the east, and Denaby Main is at the extreme point in that direction in South Yorkshire, and quite close to the ridge which indicates the great magnesian limestone formation, as yet nearly untouched, and of which Mr. WOODHOUSE says:—"It must be for the enterprise of 100 years to come to test the extent of the vast field of wealth now reposing under that mighty formation." The laying out of the surface work at Denaby is all that could be desired, every appliance calculated to economise time and labour which science could suggest having been introduced. There are two engines, each of 100-horse power, and eight boilers, of 40-horse power, by Messrs. BRADLEY and CRAVEN, of Wakefield. The machine-rooms are models of what such places should be, and the buildings are commodious and well ventilated. Gas works have recently been put down, and will be introduced into the offices and houses, of which latter 100 are now in course of erection, whilst a good many others are occupied. There are shafts 13 ft. 6 in. in diameter—wider than at most collieries in the district. As usual, at most of the deep sinkings a great deal of water was encountered at certain depths, so much so that it took upwards of four years from the commencement before the coal was reached. Besides the Barnsley seam, now being worked, there are several others which could be profitably got, amongst them being the following:—

	Depth.	Thickness.
Coal	10 yds. 0 ft.	4 ft. 1 in.
Coal	76 2	3 6
Newhall seam	—	3 5
Melton Field	—	4 4
Coal, very coarse	—	3 7

The area of the coal field is between 2000 and 3000 acres, belonging to Messrs. ANDREW MONTAGUE, A. FULLERTON, &c. When in full operation from 800 to 1000 tons can be drawn out per day, and for the removal of which there is every facility, the colliery lying in close proximity to the railway and also to the canal belonging to the River Dun Company, who guarded their interests by putting a wooden bridge across it, compelling ordinary passengers to pay a penny toll for crossing. The colliery company, however, considering that the impost was a very unfair one towards the men residing on the Mexborough side of the works, had a boat made, and ferried them across. An arrangement, however, has been come to, and the right of crossing by all persons passing to and from the colliery has been secured by an annual payment. When the coal was reached last year it was worked by the mode known as the pillar and stall, but a change has just been made in the underground management, and the workings are now being laid out by Mr. SMITH, of Monkwearmouth, for getting the coal by the long wall system. The colliery is now one of the most important in the South Yorkshire district, and the efforts now being made to work it by non-Unionists bid fair to be in every way successful, there being as many men now employed in it as in the present state of the trade are required.

ABOLITION OF PATENTS IN HOLLAND.—In the Second Chamber of the States General of Holland a Bill to abolish patents for industrial inventions has just been carried by an overwhelming majority of 49 against 8 votes. The Premier of the ex-Conservative Cabinet, Mr. Heemskerk, protested most energetically against this measure, and proposed to delay the discussion upon it till September, when the new Chamber will meet. He undertook that he would then lay before the members a Bill to improve the existing patent law. This proposal, however, was rejected. The Bill will, when approved by the first Chamber, come into operation on the day of publication.

NEW PIPE JOINTS.—An improved pipe joint has been invented by Mr. WILLIAMS, of Liverpool, and has borne the experimental tests to which it has been submitted most satisfactorily. The joint consists simply of the union of a spherical butt-ended pipe with a cylindrical socketed one, the interior surface of the latter and the spherical surface of the former being turned and bored truly to the same dimensions, so as to maintain their contact throughout a single ring, which is fixed and certain in the cylindrical socket, but variable in the spherical butt, according to the angle of direction vertically or laterally in which the pipes are united, and the perfection and tightness of the joint are unimpaired. The joint is, therefore, not only tight, but at the same time movable, so that the direction of the pipes may be altered within reasonable limits so as to adjust them to any unexpected disturbance of the steadiness of the ground which may arise.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Devon.

IN the MATTER of the COMPANIES ACT, 1862 and 1867, and of the EAST WHEAL RUSSELL MINING COMPANY.—TO BE SOLD, under the direction of the Registrar of the said Court, BY PUBLIC AUCTION, on Tuesday, the 20th day of July inst., and following day if necessary, at Eleven o'clock in the forenoon, at the

EAST WHEAL RUSSELL MINE,

In the parish of TAVISTOCK, within the said Stannaries, in lots, all that the unexpired INTEREST of the said company in the SETT under which its mining operations have been carried on, and also the undermentioned MINING MACHINERY, MATERIALS, and EFFECTS, viz.:—

ONE 40 in. cylinder STEAM PUMPING ENGINE, 9 ft. stroke, equal beam, with TWO 10 ton BOILERS.

ONE 30 in. cylinder WHIM ENGINE, adapted for pumping or hauling, with ONE 10 ton BOILER.

ONE 12 and 7 in. combined WHIM ENGINE, Cornish crusher, with 2 ft. rolls, balance bob complete, cast-iron ditto.

50 ft. shears and pulleys, complete; 2 8 arm capstans, 100 fms. 12½ in. capstan rope, poppet head and stays; angle bob, complete; 100 fms. 2½ in. flat-rods, 28 13 in. pumps, 35 12 in. ditto, 3 15 in. ditto, 11 10 in. ditto, 16 9 in. ditto, 28 8 in. ditto, 1 12 in. windbore, 2 12 in. H pieces, 2 12 in. door and doorpieces, 1 11 in. H piece, 1 11 in. door and doorpiece, 2 12 in. plunger pole, box and gland, 3 11 in. ditto, 18 pieces of 7 in. wood main rod, 14 pieces of 10 in. ditto, 68 strapping plates, different widths; staples and glands, rods, bolts, and bars; flange bolts, several tons of chain, ditto of tram iron, 2½ in. by ⅞ in. tram saddles, punches and tram wagons, shaft rolls, cobbing mills, loops and chains, whim pulleys, 2 crab winches, travelling bob, several tons of bucket rods, pump rings, lot of whim and other pulleys, zinc and other air pipes, 2 jigging machines, hutches and flooring, sample table, about 200 fms. launders, lot of new and other useful iron, 30 new cobbing hammers, box of gun-cotton and cartridges, 23 sieves, screw stocks, taps and plates, 95 shaft rolls; treble, double, and single iron blocks; bell, beams, scales, and weights; 3 large wood dressing sheds, and several 100 ft. of floors; 2 20 in. and 2 9 in. drying pipes; grindstone and frame, lot of new nails, 2 anvils, bellows, vice, mandrill, smiths and miners' tools, wheel and handbarrows, balk timber; account-house furniture, and a variety of other articles and effects in general use in mines,

For further particulars, apply to the officer in possession at the mine.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.

Dated Truro, July 7th, 1869.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the VIVIAN KAOLIN WORKS COMPANY (LIMITED).—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 1st day of July instant, presented to the Vice-Warden of the Stannaries by George Houghton Arnall, of Truro, merchant, and John Hicks Dingle, of Lostwithiel, merchant, creditors of the said company, and that the said petition is directed to be heard before the Vice-Warden, at the sittings of the Court, to be holden at the Prince's Hall, Truro, within the said Stannaries, on Wednesday, the 4th day of August next, at Twelve o'clock at noon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioners, their solicitors, or their agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., Secretary of the Vice-Warden, Truro.

Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the petitioners, their solicitors, or their agents, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 28th day of July instant, and notice thereof must at the same time be given to the petitioners, their solicitors, or their agents.

HODGE, HOCKIN, AND MARRACK, of Truro, Cornwall
(Solicitors of the Petitioners).

GREGORY, ROWCLIFFES, AND RAWLE, of 1, Bedford-row, London
(Agents of the said Solicitors).

Dated Truro, July 5th, 1869.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN RE CHIVERTON MINE.

TO BE SOLD, pursuant to an Order made in a Cause of Clogg *v.* Crawford and Others, dated the 14th day of June last, BY PUBLIC AUCTION, at the Registrar's Office, at Truro, on Wednesday, the 21st day of July instant, at Twelve o'clock at noon, the following PARTS or SHARES, viz.:—

10 (3000th) of the defendant, D. R. Crawford;
90 (3000th) of the defendant, Duncan Crawford;
10 (3000th) of the defendant, Hugh Henderson;
1 (3000th) of the defendant, Elizabeth Allen; and
7 (3000th) of the defendant, J. B. Venus.

Of and in the said MINE.

J. G. CHILCOTT, Truro
(Agent for A. C. L. Glubb, Plaintiff's Solicitor, Liskeard).

Dated Registar's Office, Truro, 8th July, 1869.

In the Matter of the Companies Act, 1862,
AND THE BWLCH-Y-PLWM LEAD MINING COMPANY (LIMITED).

TO BE SOLD, BY AUCTION, by Messrs. E. OWEN AND SON, on Thursday, the 15th day of July, 1869, at Three o'clock in the afternoon, at the Queen's Hotel, Chester (subject to conditions to be then and there produced), the company's interest in all that valuable LEAD MINE, called

"THE BWLCH-Y-PLWM,"

Situate in the parish of LLANFROTHEN, in the county of MERIONETH, NORTH WALES, together with the PLANT, consisting of a valuable WATER-WHEEL and gearing, PUMP, WASHING GEAR, and other effects, all in good working condition.

The property is offered for sale for the residue of a term of 21 years, which commenced on the 25th day of March, 1863, and subject to a dead or minimum rent of £100 per annum; but the lessor has consented to accept a surrender of the present lease, and grant a new one, at the reduced annual dead rent of £25 to a responsible purchaser.

For further particulars, apply to Mr. WILLIAM CASSON, Port Madoc; Mr. WILLIAM CRIPPIN, Seymour House, Old Trafford, Manchester; Mr. DANIEL CLARKE, No. 13, Pitt-street, Liverpool; Mr. WILLIAM RADCLIFFE, Solicitor, No. 12, Sweeting-street, Liverpool; or to the Auctioneers, Bridge-street, Carnarvon.

GOLDSBERGS COPPER MINES, IN NORWAY.

TO BE SOLD, BY AUCTION, on the Exchange, Bergen, Norway, on the 16th of August, 1869, a TWO-THIRD SHARE in the above mines, now held by the assignees of the estate of Mr. Job Petersen, including the MINES, called DOKKEN and FLAAGEN, and the LAND thereunto adjoining.

According to an agreement between the owners of the above property, each owner has a right of voting in proportion to his share or shares in the company.

The mines are situated about 12 geographical miles south of BERGEN, on STOOD ISLAND, close to the sea. The entrance to the mines is from 10 to 40 ft. above the level of the sea, close to a good harbour for vessels of every size.

The mineral produced by these mines is sulphur ore, containing, according to assays made in Swansea, from 3 to 3⅞ per cent. of fine copper. The price obtained in Newcastle-on-Tyne has been £2 to £2 15s. per ton gross.

The mines were opened in the year 1865, and have since been worked with the following results:—

Between—	Net proceeds of mineral worked. Sp. dlr.	Working expenses. Sp. dlr.	Profit. Sp. dlr.
Oct., 1865, to Dec. 31, 1866	2,876·38	2,581·17	259·21
Jan. 1, 1867, to Dec. 31, 1867	2,945·98	1,947·106	997·112
Jan. 1, 1868, to March 31, 1868	2,487·29	1,526·114	960·105
Apr. 1, 1868, to Apr. 1, 1869 (abt.)	40,000·	13,500·	26,500·

The rich finding of ore, which took place last year, is at present broken off, and, on account of present circumstances, the working is much less. The works still progress in smaller workings at four different points. Ore is still found, but in a smaller quantity, but under such circumstances that there is every belief that large seams of ore will soon be won, the more so as on the several occasions when the seams have narrowed the ultimate result has been highly satisfactory.

For further particulars, apply to—

Mr. BEYER, T.S., and H. L. CHRISTIE.

Bergen, Norway, 23d of June, 1869.

Or to G. E. BIRD AND CO., Swansea.

SALE OF MINE PROPERTY—BY TENDER.

SHROPSHIRE COPPER MINING COMPANY (LIMITED).

IN LIQUIDATION.

BY ORDER OF THE LIQUIDATOR.

TO BE SOLD, BY TENDER, all the ESTATE and beneficial and other INTEREST of the said company of and in the LEASE or GRANT of MINERALS in, under, or upon WESTCOTT FARM, and other parts of the GATTEN ESTATE, SHROPSHIRE, demised by a certain indenture of lease thereof, dated the 30th day of December, 1865, and by a certain other indenture, dated the 12th day of April, 1867, endorsed on that of the former indenture; and also all the MACHINERY, PLANT, MINING GEAR, TOOLS, TACKLE, MATERIALS, ORES, HALVANS, and APPURTENANCES of the said company, the said MINES and MINERALS belonging or appertaining.

The Liquidator will receive at his offices, No. 30, Castle-street, Liverpool, sealed tenders, endorsed "Tenders for Shropshire Copper Company's Mine, Machinery, and Effects, at Westcott," up to Two o'clock on Thursday, the 15th day of July, 1869, at which time and place the said tenders will be opened, and the purchaser declared.

The purchaser will be required to pay a deposit of 20 per cent. on the amount of the purchase-money on his tender being accepted, the purchase to be completed and the balance of the purchase-money paid, within two months from the payment of the deposit.

The Liquidator does not bind himself to accept the highest or any tender.

Inspection of the machinery, and other effects at the Mine, can be had on production to Capt. JAMES NANCARROW, on the Mine, of an order for that purpose from the Liquidator, and any further information, with inspection of the leases and schedule of the principal effects, obtained from the Liquidator,

June, 1869. Mr. T. W. READ, 30, Castle-street, Liverpool.

SOUTH CARADON MINE.

MR. SOBEY WILL OFFER FOR SALE, BY PUBLIC AUCTION, at the London Inn, Liskeard, on Monday, the 12th of July next, at Three P.M., TWO (1-512th) PARTS or SHARES in the above VALUABLE DIVIDEND-PAYING MINE, acknowledged to be one of the most sound and prosperous speculations in the counties of Devon and Cornwall.

Dated Auction Offices, Parade, Liskeard, June 24, 1869.

WEDNESBURY.

VALUABLE FREEHOLD LAND AND MINES.

MESSRS. JOSEPH COOKSEY AND SON (by the direction of the Trustees of the will of Benjamin Round, Esq.) WILL SELL, BY AUCTION, at the Hen and Chickens Hotel, New-street, Birmingham, on Thursday, July 15, 1869, at Four o'clock for Five precisely in the afternoon, subject to conditions to be then read—

LAND AT OAKESWELL END.

LOT 1.—A piece of valuable FREEHOLD BUILDING LAND, situate in Wednesbury, being a portion of a field known as "Synnemore Hall Piece," otherwise "Syllemore," having a frontage of 90 yards to the road leading from Oakeswell End, Wednesbury, towards West Bromwich, containing 1 acre, or thereabouts.

LOT 2.—A similar piece of LAND, adjoining Lot 1, with a frontage of 98 yards to the road leading from Oakeswell End aforesaid to Wood Green and West Bromwich, and containing 1 acre, or thereabouts.

LOT 3.—A corner piece of excellent BUILDING LAND, adjoining Lots 1 and 2, and having a frontage on one side of 100 yds. 1 ft. to the road leading from Oakeswell End aforesaid to Wood Green and West Bromwich, and on the other side a frontage of 111 yds. 1 ft. to the road leading from Oakeswell End aforesaid to West Bromwich, and containing in the whole 1 A. 0 R. 1¼ P., or thereabouts.

Lots 1, 2, and 3 will in the first place be offered in one lot, and if not sold, will afterwards be offered in lots as above.

LANDS AT POTTER'S LANE AND LEA BROOK.

LOT 4.—A piece of FREEHOLD LAND, being parts of "Bull Hole Piece" and "Doctor's Piece, with the ungotten MINERALS thereunder, situate adjoining the Great Western Railway, near to the Wednesbury Flour Mill, and fronting to a road leading out of Potter's Lane, with another approach from Bridge-street, containing 1 A. 2 R. 20 P., or thereabouts.

LOT 5.—Three pieces of FREEHOLD LAND, being parts of "Bull Hole Piece," "Doctor's Piece," "Cooper's Upper and Lower Pieces," and "Crabb's Piece," situate near Lot 4, and bounded by the Great Western Railway, the South Staffordshire Railway, and the River Tame, with right of road under the said railways into Potter's Lane, containing 10 A. 1 R. 30½ P. surface measurement; together with the remaining MINES and MINERALS under part of the above land, containing 9 A. 2 R. 26½ P.; and also under the Great Western Railway, adjoining the above land, containing 3 A. 1 R. 24 P.; and under the River Tame, and a piece of land on the south side thereof, containing together 2 R. 22 P.: the total mineral area being 13 A. 2 R. 32½ P.

N.B.—Part of this lot, striped pink on the plan, and containing 2 A. 3 R. 28½ P., is subject to a lease to Mr. Edward Smith, from the 25th day of March, 1867, for a term of eleven years, less three days, at a yearly surface rental of £8. Under the lease he is entitled to get all the Mines of Coal down to and including the New Mine Coal, but not any stone.

LOT 6.—Four pieces of FREEHOLD LAND, situate at Lea Brook, adjoining the South Staffordshire Railway, part in the parish of Wednesbury and part in the parish of Tipton—viz.:—

	A.	R.	P.
Slang Pieces, and parts of Near Bridge and Snape's Piece, with the pit shafts and colliery erections therein	4	0	33
Far Bridge Piece	2	3	13
Part of Lea Brook Meadow, with the pit shafts and colliery erections therein	3	1	15
Other part of Lea Brook Meadow, with the pit shafts and colliery erections therein	2	3	21
Total surface measurement	13	1	2

Together with the remaining MINERALS thereunder, and also under lands sold to the South Staffordshire and Great Western Railway Companies. The total mineral area of Lot 6 being 18A. 1R. 24P.

The Colliery Machinery, Plant, and Loose Stock, belonging to the vendors, are to be taken to at a valuation, to be made in the usual way.

For further particulars and plans, apply to Mr. F. W. SEAMAN, Solicitor, Wednesbury; to Mr. DAVID PEACOCK, Mining Engineer, Horseley Colliery, Tipton; or to the Auctioneers, Paradise-street, West Bromwich.

GLAMORGANSHIRE.

FREEHOLD ESTATE, RESIDENTIAL AND MINERAL—two miles from Pontypridd, four miles from Llantrissant, and twelve miles from the important and flourishing port of Cardiff—comprising the FARMS of TYR MAB ELLIS, COED-CAE-DDU, and PEN-COED-CAE, MANSION and GROUNDS, GROUND RENTS, STONE QUARRIES, and the various SEAMS of COAL (including the celebrated steam coal measures), which underlie the estate.

MR. D. T. ALEXANDER is favoured with instructions from the Devisee, under the will of Colonel John Hewett, to SELL, BY AUCTION, at the Angel Hotel, Cardiff, on Thursday, the 29th day of July, 1869, at Two for Three o'clock, the IMPORTANT and VALUABLE PROPERTY, known as the

TYR MAB ELLIS ESTATE,

In the following, or such other lot or lots as at the time of sale shall be declared.

LOT I.—The FARM, called "PEN-COED-CA" (otherwise Caerlan and Tylwyd), with HOMESTEAD, BUILDINGS, COTTAGES at rack and ground rents, and productive PASTURE and ARABLE LAND, together with valuable STONE QUARRIES in full work, containing in the whole about 116 A. 1 R. 5 P., situate in the parishes of Llantwit Vardre and Llantrissant, in the occupation of Mr. John Jenkins, and others.

LOT II.—The MANSION of TYR MAB ELLIS, with the BUILDINGS, PLEASURE GROUNDS, GARDENS, ORCHARDS, and productive LANDS thereto belonging, containing in the whole 78 A. 3 R. 34 P., or thereabouts, situate in the parishes of Llantrissant and Llantwit Vardre, in the occupation of Capt. Hewett, R.M., and others.

LOT III.—The FARM, called "COED-CAE-DDU," with HOMESTEAD, BUILDINGS, COTTAGES at rack and ground rents, and productive PASTURE and ARABLE LAND, containing in the whole 100 A. 3 R. 1 P., or thereabouts, situate in the parishes of Llantrissant and Llantwit Vardre, in the occupation of Mr. James Coombs, and others.

The valuable MINERALS underlying each lot will be included in and sold therewith.

The attractive mansion and grounds are in an admired situation of the neighbourhood, commanding panoramic views of varied beauty and great extent, and affording a residence suitable to the requirements of a capitalist desiring to possess and develope the valuable resources of the estate.

The reports of eminent mining engineers leave no doubt that the remunerative seams of coal found at Merthyr, Aberdare, Rhondda, and Llantwit will all be proved upon this estate.

The Taff Vale and Llantrissant Railway runs at the foot of the estate, and affords communication with the Llynvi, Ogmore, and Llantrissant Junction Railways.

Lithograph plans, and particulars and conditions of sale, can be had, on and after the 1st July, upon application to H. HOLLAND BURNE, Esq., 15, Vineyards, Bath; or to the Auctioneer, Institute Chambers, Pontypridd.

WHEAL FALMOUTH AND SPERRIES MINES,
In the Parish of KEA, CORNWALL.

TENDERS will be RECEIVED not later than FRIDAY, the 30th instant, for the WHOLE of these EXTENSIVE MINING SETTS, with the PLANT thereon.

These mines are believed to hold out great promise of success, as may be judged by the following brief report:—

TIPPET'S ENGINE-SHAFT.—At and above the 80 fm. level, mundic, copper, and tin ores were raised to a large extent. The shaft has been sunk to the 104 fm. level through a promising lode, when it was abandoned without being explored, from the inability of the then proprietors to carry it on. Between this point and Tresidder's engine-shaft three whim-shafts are sunk—Barrett's, Jenning's, and Kitto's—to the 50 and 60 fm. levels, from all of which large returns were made.

TRESIDDER'S.—At the 50 fm. level and above the workings have been on an extensive scale, and very productive. The shaft is sunk to the 60 fm. level, where the lode produces stones of lead, copper, and has a highly promising appearance. At this shaft the lode has in places produced 50 tons of mundic per fathom, and has paid the costs of working the mine for the past five years. From the commencement of working by the present company the returns have realised about £80,000, and during that period the mine has been nearly self-supporting, the capital expended amounting to £10,000 only.

The mines are situate immediately to the east of the celebrated Great Consolidated Mines, and on the same lodes, and also parallel and adjoining to the Wheal Jane, a dividend paying-mine.

The plant is very extensive, including, at Tippet's, an 80 in. cylinder PUMPING ENGINE, 10 ft. stroke, equal beam, with THREE BOILERS; 2 cast iron balance bobs; 26 fms. 18 in. plunger lift; 10 fms. 18 in. drawing lift; 25 fms. 10 in. house lift. These are all fixed and ready for immediate working, and at surface a large quantity of spare 18 and 19 in. pitwork, 1 24 in. steam whim and capstan.

At Tresidder's—ONE 50 in. cylinder PUMPING ENGINE, 10 ft. stroke, TWO BOILERS; 60 fms. 14 in. pitwork; 22 in. steam whim, capstan, and crusher; and including throughout all the plant necessary for the working of these extensive and very promising mines.

For further information, apply to Mr. JOHN PASCOE, the purser, Truro; or to Mr. CHAS. HAWKE, Chairman of the Committee, Truro, to either of whom the tenders may be addressed.

The mines are held under lease from Lord Falmouth, at 1-20th dues, *for* 21 years, dated 24th March, 1859.

CARMARTHENSHIRE.

VALUABLE COAL FIELD.

TO BE LET, with immediate possession, all the VALUABLE SEAMS of ANTHRACITE COAL under the HARBERDEG FARM, containing, by estimation, SIXTY ACRES.

The above farm is situate about 4 miles from the seaport town of Llanelly.

The Burry Port and Gwendraith Vale Railway passes within ½ mile of the farm.

Herberdeg lies in the immediate vicinity of the Conway and Foy Collieries, and the coal fields supplying the above collieries has been proved to lie under it.

The tenant of the farm has been raising sufficient coal for his own use by means of a small shaft.

A copy of the report of Mr. Hay, C.E., will be furnished (gratis).

For further particulars apply to Mr. P. A. VAUGHAN, 37, Beaumont-square, London, E.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—		10 6 8	0 5 0	Jan. 1869
200	Botallack, t. c, St. Just	91 5 0	260	270	544 5 0	16 0 0	May 1869
4000	Brookwood, c, Buckfastleigh	1 11 0	—		0 12 6	0 2 6	Aug. 1868
1000	Bronfloyd, l, Cardigan*	12 0 0	—	20 22	11 9 0	0 12 0	April 1869
5094	Bwlch Consols, s-l, Cardigan	4 0 0	—		0 5 0	0 5 0	June 1868
6400	Cashwell, l, Cumberland*	2 10 0	—		0 3 0	0 1 6	Aug. 1868
916	Cargoll, s-l, Newlyn	15 5 7	17	15 17	16 5 0	0 10 0	April 1869
1280	Chanticleer, l, Flint	0 7 8	—		0 1 0	0 0 6	Nov. 1868
2450	Cook's Kitchen, c, Illogan‡	19 14 9	13½	13 14	2 4 6	0 7 6	April 1869
509	Creegbrawse and Penkevil, t	—	—		2 5 0	1 5 0	April 1868
867	Cwm Erfin, l, Cardiganshire*	7 10 0	—		30 13 0	0 10 0	July 1869
128	Cwmystwith, l, Cardiganshire	60 0 0	—		385 10 0	2 0 0	Feb. 1869
280	Derwent Mines, s-l, Durham	300 0 0	—		177 0 0	2 10 0	July 1868
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	160	145 165	1132 0 0	4 0 0	May 1869
656	Ding Dong, t, Gulval‡	49 14 6	26	22½ 25	3 10 0	1 10 0	May 1869
1432	Dolcoath, c, t, Camborne	32 4 6	125	120 125	224 2 6	3 0 0	June 1869
6144	East Caradon, c, St. Cleer†	2 14 6	7⅞	6⅛ 7	14 11 6	0 2 0	July 1867
300	East Darren, l, Cardiganshire	32 0 0	—		166 10 0	2 0 0	Mar. 1869
6400	East Pool, t, c, Pool, Illogan	0 9 9	7¾	7 8	9 3 0	0 3 3	May 1869
1906	East Wheal Lovell, t, Wendron	3 9 0	13	14½ 15	4 16 0	0 5 0	May 1869
2800	Foxdale, l, Isle of Man*	25 0 0	—		73 10 0	0 10 0	July 1869
5000	Frank Mills, l, Christow	3 18 6	4	3⅞ 4⅛	3 13 6	0 4 0	April 1869
3950	Gawton, c, Tavistock	3 10 6	—		0 3 0	0 3 0	Jan. 1868
15000	Great Laxey, l, Isle of Man*	4 0 0	19	17½ 18½	10 15 0	0 10 0	June 1869
3000	Great Northern Manganese*	5 0 0	—		—	5 p.ct.	Feb. 1869
5908	Great Wheal Vor, t, c, Helston†	40 0 0	14½	13½ 14	14 11 0	0 10 0	June 1869
1024	Herodsfoot, l, near Liskeard†	8 10 0	45	42 44	49 10 0	1 10 0	Feb. 1869
12000	Holmbush and Kelly Bray, c*	1 0 0	—		0 1 0	0 1 0	May 1869
165	Levant, c, t, St. Just	10 8 1	—		1099 0 0	4 0 0	Jan. 1869
400	Lisburne, l, Cardiganshire	18 15 0	—		515 0 0	3 0 0	Mar. 1869
3000	Maes-y-Safn, l, Flint*	20 0 0	29	28 29	4 0 0	0 5 0	Oct. 1868
9000	Marke Valley, c, Caradon	4 10 6	8½	8¼ 8½	5 4 0	0 5 0	April 1869
3000	Minera Boundary, l, Wrexham*	1 0 0	—		0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co. l, Wrexham*	25 0 0	—		253 13 6	5 0 0	May 1869
20000	Mining Co. of Ireland, c, l, cl	7 0 0	10½	10¼ 10½	—	6 p.ct.	July 1869
40000	Mwyndy Iron Ore*†	3 7 0	1⅜	1⅛ 1⅜	0 11 6	0 3 0	Feb. 1869
2000	North Levant, t, c, St. Just	10 12 0	—		0 5 0	0 5 0	Mar. 1869
200	Parys Mines, c, Anglesey*	50 0 0	—		162 10 0	2 10 0	Aug. 1869
5000	Penhalls, t, St. Agnes	3 0 0	—		0 6 6	0 4 0	April 1869
12800	Prince of Wales, c, Calstock	0 12 6	1¼	1¼ 1⅜	0 8 6	0 1 0	Nov. 1868
1120	Providence, t, Uny Lelant†	10 6 7	35	33 35	88 2 6	1 10 0	Mar. 1869
512	South Caradon, c, St. Cleer†	1 5 0	—	360 380	617 10 0	5 0 0	May 1869
6000	South Darren, l, Cardigan*	3 6 6	—		0 16 0	0 1 6	May 1869
937	South Wh. Crofty, c, Illogan	24 10 10	—		2 0 0	0 10 0	May 1869
496	So. Wh. Frances, c, Illog.†‡	18 18 9	14	12 14	374 13 6	1 0 0	Mar. 1868
940	St. Ives Consols, t, St. Ives‡	10 15 0	16½		0 10 0	0 10 0	May 1869
508	Summer Hill, l, Mold	3 18 6	—		2 5 6	0 5 0	Feb. 1868
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	16	15½ 16½	21 1 0	0 10 0	May 1869
2000	Trumpet Cons., t, Helston	11 10 0	23	21 22	8 14 0	0 14 0	April 1869
12000	Van, l, Llanidloes*	4 5 0	39	37 38	0 5 0	0 5 0	June 1869
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	48	47½ 49	35 7 6	2 0 0	May 1869
242	Spearne Moor, t, St. Just	6 2 0	—		1 0 0	1 0 0	June 1869
5000	West Godolphin, t, c, Breage	0 1 0	—		0 3 0	0 1 0	July 1869
2582	West Great Work, t, Breage	5 11 0	4		0 2 0	0 2 0	June 1869
512	West Wheal Frances, t, Illogan	106 15 0	53	50 52	1 10 0	1 10 0	April 1869
400	W. Wheal Seton, c, Camborne†	47 0 0	185	175 185	633 0 0	5 0 0	June 1869
512	Wheal Basset, c, Illogan†	5 2 6	—		632 10 0	1 0 0	June 1868
1024	Wheal Friendship, c, Tavistock	20 0 0	—		300 10 0	0 10 0	Nov. 1866
512	Wheal Jane, s-l, Kea	10 15 0	45		24 10 0	1 10 0	May 1869
4295	Wheal Kitty, t, St. Agnes	5 4 6	5	4¾ 5	3 18 0	0 5 0	May 1869
1024	Wheal Kitty, t, Uny Lelant†	3 10 6	—	6 7	10 12 6	0 10 0	July 1869
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	16	14½ 15	68 10 0	0 15 0	June 1869
1000	Wh. Mary Hutchins, Plymp., t	2 12 6	—		0 5 0	0 5 0	May 1869
80	Wheal Owles, t, St. Just‡	70 0 0	—		415 13 0	12 10 0	May 1869
396	Wheal Seton, t, c, Camborne	58 10 0	50	40 50	254 15 0	2 0 0	Feb. 1868
3000	Whitewell Lead, Clitheroe*	0 5 0	—		1 0 0	0 10 0	Dec. 1867
17000	Wicklow, c, t, Wicklow	2 10 0	10	9¾ 10	49 6 0	0 5 0	Mar. 1869

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
35000	Alamillos, l, Spain*†	2 0 0	1¾	1¼ 1¾	0 6 6	0 2 0	Mar. 1869
20000	Australian, c, South Australia†‡	7 7 6	—		0 1 6	0 0 6	Aug. 1868
15000	Cape Copper Mining*†	7 0 0	—		3 17 6	0 15 0	Nov. 1868
30000	Central American Association*†	1 10 0	—		—	—	
10000	Copiapo Mining Co., Chili†‡	16 10 0	2½	1½ 2½	0 4 0	0 4 0	April 1869
76162	Don Pedro North del Rey*†‡	0 14 0	5	4¼ 4½	1 3 3	0 3 0	May 1869
70000	English and Australian, c‡	2 10 0	—		—	0 0 9	Feb. 1869
25000	Fortuna, l, Spain*†	2 0 0	2½	2 2⅛	1 14 10	0 3 0	Mar. 1869
20000	Gen. Mining Assoc., Nova Scotia†	20 0 0	—		23 10 0	0 15 0	June 1867
10000	Gonnesa, l, Sardinia*	5 0 0	—		10 per cent.		Aug. 1868
68000	Kapunda Mining Co., Austra†‡	1 0 0	⅜	¼ ⅜	0 1 10	0 0 6	Nov. 1868
15000	Linares, t, Spain*†	3 0 0	3	2½ 3	11 18 4	0 3 4	Mar. 1869
50000	Panulcillo, c, Chili*†	3 0 0	¾	¼ ½	10 per cent.		Yearly.
6000	Peel River Land and Mineral*†	100 0 0	—		—	—	
10000	Pontgibaud, s-l, France†	20 0 0	12½	11½ 12½	5 6 2	0 19 7	Dec. 1868
100000	Port Phillip, g, Clunes*†	1 0 0	1¾	1⅜ 1¾	1 3 6	0 1 6	Jan. 1869
120000	Scottish Australian Min. Co.†	1 0 0	1	¾ 1	10 per cent.		Nov. 1868
11000	St. John del Rey, Brazil*†	15 0 0	17	18	81 10 0	4 5 0	Dec. 1867
4000	Swedish Sulphur Ore*	2 10 0	—		7½ per cent.		Dec. 1868
13500	Vancouver Coal Mining*†‡	6 0 0	8	7⅛ 8	2 14 6	0 12 0	May 1869
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 7	0 0 7	July 1868
40000	West Canada Mining Co.*	1 0 0	—		0 19 6	0 2 6	May 1866

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
50000	Anglo-Argentine, g, s, Argentine Republic*	1 0 0	1¼	1 1¼	
100000	Anglo-Brazilian, g*†	0 11 0	⅝	½ ⅝	Nov. 1866
12500	Anglo-Italian, g*†	0 15 0	—		Jan. 1868
20000	Australian United, g	1 0 0	—		Mar. 1868
2464	Burra Burra, c, South Australia‡	5 0 0			
20000	Capula, s, Mexico*†	2 0 0	—		Jan. 1869
30000	Chontales, g, s, Nicaragua*†	5 0 0	1½	1¼ 1½	Mar. 1868
12000	Cobre Copper Company, c, Cuba†‡*	45 10 0	—		Jan. 1868
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—		Nov. 1866
40000	Fortune Copper Mining Co. of Western Australia	2 0 0	1¼		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 17 0	1¼	1¼ 1⅜	May 1868
150000	General Brazilian*	0 10 0	⅞	⅞	Feb. 1869
50000	Javali, g, Nicaragua	2 0 0	—		Jan. 1869
7927	Lusitanian (Portugal)†‡	2 15 0	¼	⅛ ⅜	Dec. 1866
83640	Mariquita, g, s, New Granada	1 0 0	—		Feb. 1868
12500	Nerbudda Coal and Iron, India*†	6 10 0	—		Dec. 1867
51000	New Quebrada, c, Venezuela*†	4 4 0	—		
80000	Pestarena United, g, Italy*†	2 17 6	1⅝	1⅜ 1⅝	
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]	—	—		May 1866
100000	Rossa Grande, g, Brazil*†	0 14 0	1⅜	1 1¼	June 1867
15000	San Pedro del Monte, s, Mexico*	4 0 0	5		Sept. 1866
10000	San Roque, l, Spain	5 0 0	—		Fully pd.
50000	Sao Vicente, Brazil*†	0 6 0	½	⅛ ⅜	Oct. 1868
100000	Taquaril, g, Brazil*	0 7 6	⅝	½ ⅝	Oct. 1868
43174	United Mexican, s, Mexico†‡*	28 5 2	3	3	May 1868
30000	Val Antigoria, g, Italy*	1 2 6	—		
6000	Val Sassam, s, c, l, Italy*†	8 0 0	—		Aug. 1868
45000	Victor Emanuel, c, Italy*	1 0 0	—		Fully pd.
80000	Worthing, c, South Australia*†	1 0 0	⅜	⅛ ¼	Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	¼	⅛ ¼	Fully pd.
45000	Yudanamutana, c, South Australia*†‡	3 0 0	2	1⅜ 1½	Fully pd.

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
12000	Brynpostig, Montgomery, l*	1 0 0	—		
3000	Carn Brea, c, t, Illogan‡	30 0 0	13		June 1868
3000	Chiverton, l, Perranzabuloe	11 0 0	3¾	3¼ 3½	Nov. 1868
3000	Chiverton Moor, l, Perranzabuloe	7 0 6	3¼	2¾ 3	Feb. 1869
3880	Clifford Amalgamated, c, Gwennap‡	53 0 0	—		Oct. 1868
12800	Drake Walls, t, Calstock‡	2 10 0	⅞	¾ ⅞	Jan. 1868
512	East Basset, c, Redruth†‡	37 0 0	—	4 6	Nov. 1868
6000	East Carn Brea, c, Redruth‡	4 18 0	½		April 1869
6000	East Grenville, c, Camborne	4 5 0	4⅛		May 1869
6144	Gonamena, c, St. Cleer	7 16 3	—		June 1869
5000	Great North Downs, c, Redruth	6 13 0	2¼		Feb. 1867
12500	Great North Laxey (Isle of Man)*	1 0 0	1⅛	1 1⅛	
5143	Great South Tolgus, c, Redruth	1 16 6	—		June 1869
1798	Great Wheal Fortune, t, Breage	31 7 4	—		Mar. 1868
6000	Hingston Down, c, Calstock†	5 12 0	—		Dec. 1868
400	New Wheal Seton, c, Camborne	65 5 0	70	60 70	April 1869
3457	North Downs, c, Redruth	5 12 10	—		Mar. 1869
695	North Roskear, c, Camborne	61 19 0	7	4 6	Jan. 1869
5936	North Treskerby, c, St. Agnes	1 13 10	¾	⅝ ¾	Feb. 1869
12000	Ohio Crown Lead, Isle of Man	12 0 0	—		
1024	Rose and Chiverton United, l, Newlyn	7 0 0	—		May 1869
5869	Rosewall Hill & Ransom, t‡	4 0 0	1⅛	1¼ 1⅛	
6123	South Condurrow, t, c, Camborne	4 15 6	—	1¼ 1½	June 1869
1000	South Merllyn, l, Flint	1 0 0	1¼	1⅛ 1¼	
920	Stray Park, c, t, Camborne†‡	46 19 8	7		April 1869
12000	Van Consols, Llanidloes, l*	2 10 0	3¼	2⅛ 3	
20000	Victoria (South Devon), c, Ashburton*	0 10 0	1	1 1¼	May 1869
6000	West Basset, c, Illogan†‡	2 0 0	—		May 1868
1024	West Caradon, c, St. Cleer‡‡	27 0 0	5⅛	3⅛ 4½	Mar. 1869
6000	Wheal Agar, c, Illogan	7 18 0	—		Mar. 1889
512	Wheal Buller, c, Redruth†‡	30 10 0	14	11 13	May 1869
5724	Wheal Grenville, c, Camborne†	10 10 0	2⅝	2¼ 2½	Dec. 1868
1040	Wheal Trelawny, s-l, Liskeard†	10 17 0	7		Mar. 1869
4096	Wheal Uny, t, c, Redruth	10 14 6	3¾	3⅛ 3¾	Oct. 1868

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
4000	Ballacorkish, I. of Man, l, c*	4 10 0	—	
4000	Bedford Consols, c, Tavistock	3 1 6	—	
4000	Bedford United, c, Tavist.*	3 1 8	2	1¾ 2
5000	Blue Hills, t, c, St. Agnes	0 5 0	—	
1248	Boscaswell, t, c, St. Just	7 6 0	—	
5000	Bottle Hill, t, Plympton	1 14 6	—	
5000	Bryn Gwiog, l, Flint	0 18 0	—	
1200	Bryn Gwyn, l, Mold*‡	9 0 0	—	
7500	Brynystwith, l*	2 0 0	—	
1000	Budnick Consols, t	2 14 0	4¾	4 4½
6000	Bwadrain Cons., s-l, Cardig.	3 5 0	—	
30000	Caldbeck Fells, l, Cumberld.*	1 15 0	⅞	
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 25s. pd.]			
5000	Capel Banhaglog, l, Mont.*	2 0 0	2⅜	
914	Caradon Consols, c, St. Cleer	33 6 0	—	
6000	Carn Camborne, c, Cambrn.	2 12 0	—	
3000	Chiverton Valley, l, Perranz.	2 5 0	⅞	⅞
2048	Colquite & Callington Un., c.	1 11 0	—	
256	Condurrow, c, t, Camborne‡	76 10 0	—	
50000	Connorree, c, sul, Wicklow*	1 0 0	⅛	⅛
983	Copper Hill, c, Redruth‡	12 10 0	—	
1000	Cornwall Hematite*	10 0 0	—	11 11½
1055	Craddock Moor, c, St. Cleer‡	14 18 0	—	
6000	Cuddra, t, St. Austell	5 10 0	—	
300	Cwm Darren, Cardigan*	—	—	
1000	Deep Level, s-l, Holywell	30 0 0	—	
4000	Devon & Cornwall United	5 18 0	—	
5000	Dolwen, l, Cardiganshire	0 10 0	1¼	1 1⅛
1000	East Basset and Grylls, t	3 5 0		
2926	East Bottle Hill, Plymp., t, c	0 14 0	½	⅝ ¾
4000	East Chiverton, l, Perranz.	3 7 9	1⅛	
4000	E. Gunnislake & S. Bed. c	11 4 0	—	
6000	East Laxey, l, Isle of Man	3 0 0	—	
4096	E. New Wh. Lovell, t, Wend.	0 5 0	—	
3640	East Providence, t, Lelant	7 3 3	—	
5000	E. Rosewarne, c, t, Gwinear	3 1 6	—	
6000	East Snaefell, l, I. of Man*	3 0 0	—	
5610	East Seton, c, Camborne	0 19 6	—	⅞ 1⅛
2000	East Trumpet, c, t	1 15 0	—	
6000	East Wheal Reeth	0 2 0	1¼	
6000	Ebury Lead Min. Co., Flint*	2 10 0	—	
5000	Exmouth, s-l, Christow	0 3 6	—	
6000	Gen. Min. Co. for Ireland, c.	5 10 0	—	
40000	Glasgow Caradon, c* [30,000 £1 p., 10,000 15s. p.]			
5700	Goginan, Cardigan, l	12 10 0	—	
2866	Great Caradon, c, St. Ive	4 5 9	⅝	
6000	Great N. Tolgus, c, Illogan	1 0 0	—	½ 1
4800	Gt. Retallack, s-l, b, Perran.	2 19 6	—	
15000	Great Rhosesmor, l	5 0 0	—	
4096	Great Royalton, t	0 7 6	1⅛	1 1⅛
6000	Gt. S. Chiverton, s-l, Perranz	2 0 0	—	
6000	Great Western, t	2 0 0	2¼	
3313	Gt. Wh. Baddern, t, Devoran	7 17 6	—	
119	Great Work, t, Germoe	100 0 0	—	
1024	Gunnislake (Clitters'), t, c	4 19 0	—	
6000	Gwydyr Park, l, Llanrwst	1 12 0	—	
5000	Ironmasters' Company*	10 0 0	12	
10000	Killaloe, s, Tipperary	1 0 0	⅞	
1019	Leeds and St. Aubyn, t, c	19 13 4	—	
1000	Llywernog, l, Cardiganshire	13 0 0	—	9½
5120	Lovell Consols, Wendron, t.	0 6 0	1⅛	
6000	Maudlin, c, Lostwithiel	4 7 0	—	
6000	Mid-Wales, l, Llanidloes*	2 10 0	3¼	
4662	Minera Union, l [2500 £4 p., 2162 £2 7s. 6d. p.]			
640	Mount Pleasant, l, Mold	4 0 0	—	
1024	Nangiles, t, c, Kea	34 12 0	10½	
6000	New Brynpostig, l, Llanid.	1 10 0	1⅝	
1500	New Chiverton, l, Perranz.	1 4 6	—	
6000	New Clifford, c., Gwennap*	3 5 0	—	
6250	N. Crow Hill, l, St. Stephen.	3 11 0	—	
6514	New E. Russell, c, Tavistock	0 12 6	—	
20000	New Gt. Cons., c, Tavistock*	1 0 0	—	
6400	New Pembroke, St. Blaz. t, c	1 17 0	—	
3425	New Treleigh	6 10 0	—	
6000	New Westminster, l*	6 10 0	4½	
4096	New Wh. Lovell, t, Wendron	1 19 6	1¾	1¾ 1⅞
4000	N. Wh. Prosper, t, St. Hilary	0 2 6	1¼	
2000	N. Wh. Towan, c, t, Wendron	1 10 0	—	
5000	No. Dolcoath, c, Camborne	4 3 0	—	
1361	No. Grambler, c, Redruth	9 3 9	—	
6000	North Jane, t, s-l, Kenwyn	3 7 6	⅝	
4000	No. Phœnix, c, Linkinhorne	4 11 0	—	
3240	North Pool, c, Illogan	6 13 6	⅝	½ ⅝
1000	North Retallack	2 0 0	3	
6000	North Wheal Basset, c, t†	5 0 0	—	
3000	N. Wh. Chiverton, l, Perran.	5 0 0	—	
5610	N. Wh. Crofty, c, Illogan†	3 11 3	¾	¾ ⅞
12288	Okel Tor, c, Calstock	2 7 4	—	
8000	Old Gunnislake, c, Calstock	3 9 6	—	
6400	Par Consols, c, St. Blazey†‡	2 14 6	—	
5754	Pedn-an-drea, t, Redruth	8 1 6	—	
256	Pendarves United	50 0 0	37	30 31
5000	Pendeen Consols, c, St. Just	7 17 0	—	
4000	Penhale United, s-l*	4 10 0	—	
2177	Penhale Wh. Vor, t, c, Breage	7 2 6	—	
6000	Perran Wheal Vyvyan	0 10 0	⅝	
3000	Pickard's Down, s-l, Brnstpl.	0 1 6	¼	⅛ ¼
1772	Polberro, t, St. Agnes	15 0 0	—	
2000	Polbreen	3 0 0	—	
12800	Princess of Wales, c, t	0 7 0	⅜	
6000	Prosper U., t, c, St. Hilary	9 14 0	—	
4620	Redmoor, c, t, Callington	2 1 0	—	
6000	Reinnie Laxey, l, I. of Man*	4 10 0	—	
6000	Roaring Water, c*	2 15 0	—	
2000	Rosecliff and Tolcarne, l*	9 15 0	—	
10000	Royalton, t, St. Columb	1 1 0	1⅛	1 1⅛
20500	Snaefell, l, Isle of Man*	1 0 0	—	
512	South Basset, c, Gwennap	30 10 0	—	
5000	South Carn Brea, c, t	0 10 0	½	⅜ ½
3000	So. Chiverton, s, l, Perranz.	6 2 6	—	
5000	So. Gt. Work, t, c, St. Hilary	0 2 6	—	
6000	South Grenville, c	0 2 0	—	
3395	So. Herodsfoot, l, Liskeard	4 13 0	1⅛	1 1⅛
400	So. Wh. Seton, c, Camborne	90 13 0	—	
673	St. Ives Wh. Allen, t, St. Ives	18 18 7	—	
8771	St. Just Amalg., t,* [6000 £3 10s. pd., 2771 £2 5s. pd.]			
300	Steeple Aston Iron Ore Co.	10 0 0	—	
7000	Stiperstones, l, Salop*	6 0 0	—	
6000	Tamar Valley, s-l, Beeralston	0 18 0	—	
3500	Tin Hill, t, St. Austell	1 12 0	—	
6000	Tin Valley, St. Neot	1 0 0	—	
548	Trelyon Consols, t, St. Ives	16 10 0	—	
501	Tresavean and Trethurrup	16 11 0	5½	5 5½
4096	Trewetha, s-l, Menheniot	10 19 6	—	
1943	Treworlis, t, Wendron	11 15 4	—	
70	Tygwyn, s-l, Cardigan	25 0 0	—	
1000	Vaughan, s-l, Cardigan	1 0 0	—	
7664	Vigra and Clogau, c, Dolg.*‡	5 0 0	—	
1000	West Cwm Erfin, s-l	0 10 0	—	
256	West Damsel, c, Gwennap	38 10 0	—	
12800	W. Drake Walls, c, Calstock	0 8 6	⅜	
12000	W. Maria & Fortes., c, Lam.	3 13 0	—	
12800	West Prince of Wales, c	0 11 0	—	
838	West Rose Down, c, Linking.	23 0 0	35	[illegible] 32¼
3535	West St. Ives, t, c, St. Ives	0 6 0	[illegible]	
512	West Tolgus, c, Redruth	62 0 0	35	
5000	West Wh. Kitty, t, St. Agnes	3 12 0	—	
4096	W. Wh. Tremayne, St. Erth	0 14 0	—	
741	Wheal Basset and Grylls, t	7 18 6	8	7 8
5368	Wheal Crebor, c, Tavistock	2 8 6	⅝	
811	Wh. Emily Henrietta, c, Illo.	20 15 0	—	
4000	Wh. Emma, c, Buckfastleigh	3 19 0	—	
1560	Wheal Falmouth & Sperries	9 1 0	—	
3700	Wheal Ida, s-l, St. Ive	1 9 6	⅜	
896	Wh. Margaret, t, Uny Le.‡	13 17 6	8	5 7
728	Wheal Margery, St. Ives, t, c	27 4 0	—	
6000	Wheal Mary Florence, c*	2 10 0	—	
2000	Wheal Rose, c, Scorrier	1 10 0	—	
4663	Wheal Sparnon, c	3 17 0	—	
1920	Wh. Trannack, c, Sithney	1 13 3	—	
1200	Wheal Trevenna, t, c*	10 0 0	—	

IRON AND COAL COMPANIES.

Shares.	Companies.	Paid.	Last Pr.	Bus. done.
100	Bolckow, Vaughan, and Co.*	30 0 0	—	39 40
100	Brown, John, and Co.*	70 0 0	—	40 42
100	Charles Cammell and Co.*	80 0 0	—	49 50
10	Consett Iron Company*	7 10 0	—	8½ 8¾
32	Ebbw Vale Iron Co.*	27 10 0	—	15½ 16½
15	Hopkins, Gilkes, and Co.*	10 0 0	—	8 9
12½	Mersey Steel and Iron Co.*	11 10 0	—	3 3¼
10	Midland Iron Company*	5 0 0	—	12 12¼
100	Parkgate Iron Company*	57 10 0	—	22½ 23
20	Patent Shaft & Axletree Co.*	10 0 0	—	15 15¼
50	Rhymney Iron Company	50 0 0	—	26 27
15	Ditto, New	15 0 0	—	7½ 8
100	Sheepbridge Coal & Iron Co.*	50 0 0	—	28½ 29½
100	Staveley Coal and Iron Co.*	60 0 0	—	90 91
100	Thames Iron Company*	100 0 0	—	30 31

b, blende; cl, coal; c, copper; g, gold; l, lead; s, silver; sl, slate; sl, silver-lead; t, tin; z, zinc.

. Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those marked thus ‡ have paid Dividends.

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